

APPENDICES

Appendix A. Glossary of Key Terms

June 2025



Glossary of Key Terms

To support clarity and consistency throughout the 2025 Strategic Climate Action Plan, the glossary below defines key terms that are used across the document. These definitions ensure a shared understanding of important concepts, strategies, and frameworks that guide King County's climate action work. The glossary serves as a reference tool for readers, partners, and stakeholders, helping to align interpretation and support informed action toward our shared climate goals.

Adaptation	In human systems, the process of adjustment to actual or expected climate and its effects, to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate. ¹
Adaptive capacity	The combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities. ²
Anthropogenic	Made by people or resulting from human activities. Typically used in the context of emissions that are produced as a result of human activities. ³
Biogas	Collected from natural decomposition processes of organic waste materials at landfills, wastewater treatment plants, and dairies. With limited or no cleaning, biogas can be used for heating and electricity generation.
Carbon dioxide (CO2)	A naturally occurring gas in the earth's atmosphere. It is also a byproduct of human activities such as burning fossil fuels. Carbon dioxide is the principal greenhouse gas produced by human activity. ⁴
Carbon footprint	The total amount of greenhouse gases that are emitted into the atmosphere each year by a person, family, building, organization, or company. A person's carbon footprint includes greenhouse gas emissions from fuel that an individual utilizes directly, such as by heating a home or riding in a car. It also includes greenhouse gases that come from producing the goods or services that the individual uses, including emissions from power plants that make electricity, factories that make products, and landfills where trash gets sent. ⁵
Carbon neutral	A process where there is no net release of CO2. For example, growing biomass takes CO2 out of the atmosphere, whereas burning it releases the gas again. The process would be carbon neutral if the amount taken out and the amount released were identical. A company or country can also achieve carbon neutrality by means of carbon offsetting. ⁶
Carbon offsetting	A process that allows individuals, businesses or governments to compensate for their emissions by supporting projects that reduce or remove emissions elsewhere. ⁷

Carbon sequestration

The process of storing carbon dioxide. This can happen naturally, as growing trees and plants turn CO2 into biomass (wood, leaves, and so on). It can also refer to the capture and storage of CO2 produced by industry.⁸

Carbon sink

Any process, activity, or mechanism that removes carbon from the atmosphere. The biggest carbon sinks are the world's oceans and forests, which absorb large amounts of carbon dioxide from the earth's atmosphere.⁹

Climate

Climate in a narrow sense is usually defined as the average weather, or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization. The relevant quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system. In various chapters in this report different averaging periods, such as a period of 20 years, are also used. ¹⁰

Climate change

A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use¹¹ human activity. Global warming is one aspect of climate change.¹²

Climate equity

Climate equity ensures that all people have access and opportunity to benefit from climate solutions, while not bearing an unequal burden of the impacts of climate change. This requires a holistic approach to equity in climate work that divides the burden of responding to climate change amongst those who contribute the most to the problem, while sharing the opportunities and benefits that equitable climate action presents with those that are most impacted. 13,14

Climate justice

Climate justice is the application of racial, environmental, social, and economic justice to climate response, which recognizes the continued legacy of systems of oppression and environmental exploitation. This shift in approach widens the focus from reducing greenhouse gases and addressing climate impacts to include, at its heart, the leadership of people and communities most vulnerable to climate impacts. ¹⁵ Achieving climate justice means creating a just, healthy, sustainable future for everyone that recognizes economic, political, social, and civil rights.

emissions embod	Greenhouse gas emissions associated with goods and services. These include embodied emissions associated with the production, transportation, use and disposal of goods, food, and services.	
Disproportionate climate impacts climate impacts change differently. Working to advance environmental justice will be important as the impacts of climate change already fall disproportic communities of color, immigrants, refugees, people with pre-existic conditions, and lower income residents. 16		
manufa	ied carbon refers to the greenhouse gas emissions arising from the acturing, transportation, installation, maintenance, and disposal of g and infrastructure materials. ¹⁷	
The rel	nouse gases that are put into the atmosphere from human activities. ease of greenhouse gases and/or their precursors and aerosols into nosphere over a specified area and time period. 18	
Energy efficiency Using I	ess energy to provide the same service. ¹⁹	
race, co	r treatment and meaningful involvement of all people regardless of plor, national origin, or income with respect to the development, nentation, and enforcement of environmental laws, regulations, and S. ²⁰	
Extreme events A weather event that is rare at a specific place and time of year, i example, heat waves, cold waves, heavy rains, periods of drough flooding, and severe storms. ²¹		
events statistic	sode of abnormally high rain or snow. The definition of "extreme" is a cal concept that varies depending on location, season, and length of torical record. ²²	
hydroc	I resources, such as coal, oil, and natural gas, containing arbons. These fuels are formed in the earth over millions of years and e carbon dioxide when burned. ²³	
gas underg type of nation	ised mostly of methane and other hydrocarbons, this gas is formed fround through the long decay of organic materials. This is the typical natural gas delivered to homes and businesses through an extensive wide piping network. Much of this gas is currently extracted through a scalled hydraulic fracturing, or "fracking."	
communities climate	ne communities are those that are disproportionately impacted by change due to existing and historic racial, social, environmental, and nic inequities, and who have limited resources and/or capacity to	

adapt. These populations often experience the earliest and most acute impacts of climate change, but whose experiences afford unique strengths and insights into climate resilience strategies and practices. Frontline communities include Black, Indigenous, and People of Color (BIPOC) communities, immigrants and refugees, people living with low incomes, communities experiencing disproportionate pollution exposure, women and gender non-conforming people, LGBTQIA people, people who live and/or work outside, those with existing health issues, people with limited English skills, and other climate-vulnerable groups.

Greenhouse gases (GHGs)

Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, which absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, by the atmosphere itself, and by clouds. This property causes the greenhouse effect. Water vapor (H2O), carbon dioxide (CO2), nitrous oxide (N2O), methane (CH4), and ozone (O3) are the primary greenhouse gases in the Earth's atmosphere.²⁴

Greenhouse effect

Trapping and buildup of heat in the atmosphere (troposphere) near the earth's surface. Some of the heat flowing back toward space from the earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase.²⁵

Hazard mitigation

Hazard mitigation describes actions taken to help reduce or eliminate long-term risks caused by natural, manmade, or technological hazards, such as flooding, earthquakes, dam failure, or cyber incidents.²⁶

Methane

Methane is the second most important man-made greenhouse gas. Sources include both the natural world (wetlands, termites, wildfires) and human activity (agriculture, waste dumps, leaks from coal mining).²⁷

Ocean acidification

The process by which ocean waters have become more acidic due to the absorption of human-produced carbon dioxide, which interacts with ocean water to form carbonic acid and lower the ocean's pH. Acidity reduces the capacity of key plankton species and shelled animals to form and maintain shells.²⁸

Ozone

A colorless gas consisting of three atoms of oxygen, readily reacting with many other substances. Ozone in the upper atmosphere protects the earth from harmful levels of ultraviolet radiation from the sun. In the lower atmosphere, ozone is an air pollutant with harmful effects on human health.²⁹

Particulate matter (PM)

Very small pieces of solid or liquid matter such as particles of soot, dust, fumes, mists, or aerosols. The physical characteristics of particles, and how

	they combine with other particles, are part of the feedback mechanisms of the atmosphere. ³⁰
Pre-industrial levels of carbon dioxide	The levels of carbon dioxide in the atmosphere prior to the start of the Industrial Revolution. These levels are estimated to be about 280 parts per million (ppm) (by volume). The current level is around 420 ppm. ³¹
Preparedness	Actions taken to build, apply, and sustain the capabilities necessary to prevent, protect against, and ameliorate negative effects. ³²
Renewable energy	Renewable energy is energy created from sources that can be replenished in a short period of time. The five renewable sources used most often are biomass (such as wood and biogas), the movement of water, geothermal (heat from within the earth), wind, and solar. ^{33 34}
Renewable natural gas	The term for biogas from landfills, wastewater treatment plants, dairies, and other anerobic digestion processes that has undergone extensive purification to meet quality standards such that it can be injected into natural gas pipelines as a direct substitute for fossil-based natural gas.
Resilience	Resilience is a broad concept that can apply to individuals, communities, and social, economic, and environmental systems. Resilience is the capacity to cope with a hazardous event or long-term trend in ways that maintain essential identities, functions, and structures while also maintaining the capacity to learn, adapt, and/or transform. ³⁵
Risk	Risks are threats to life, health and safety, the environment, economic well-being, and other things of value. Risks are often evaluated in terms of how likely they are to occur (probability) and the damages that would result if they did happen (consequences). ³⁶
Sea level rise	Sea level rise refers to the increase in average sea level over time, primarily caused by the expansion of ocean waters due to the warming of the Earth's atmosphere and the melting of land-based ice. ³⁷
Social vulnerability	Every community must prepare for and respond to hazardous events, whether a natural disaster like a tornado or disease outbreak, or a human-made event such as a harmful chemical spill. A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors are known as "social vulnerability." 38
Storm surge	The temporary increase, at a particular locality, in the height of the sea due to extreme meteorological conditions (low atmospheric pressure and/or strong winds). The storm surge is defined as being the excess above the level expected from the tidal variation alone at that time and place. ³⁹

Stressor

Something that affects people and on natural, managed, and socioeconomic systems. Multiple stressors can have compounded effects, such as when economic or market stress combines with drought to negatively impact farmers.⁴⁰

Urban heat island effect

Structures such as buildings, roads, and other infrastructure absorb and reemit the sun's heat more than natural landscapes such as forests and water bodies. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying areas. These pockets of heat are referred to as "heat islands." Heat islands can form under a variety of conditions, including during the day or night, in small or large cities, in suburban areas, in northern or southern climates, and in any season. ⁴¹

Vector-borne diseases

An organism, such as an insect, that transmits disease-causing microorganisms such as viruses or bacteria. Vector-borne diseases include, for example, malaria, dengue fever, and Lyme disease.⁴²

Vulnerability

The degree to which physical, biological, and socioeconomic systems are susceptible to, and unable to cope with, adverse impacts of climate change. 43

Weather

The state of the atmosphere regarding temperature, cloudiness, rainfall, wind, and other meteorological conditions. Weather is not the same as climate, which is the average weather over a much longer period.⁴⁴

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² Intergovernmental Panel on Climate Change. (2012). Glossary of Terms.

³ National Aeronautics and Space Administration. (n.d.). Glossary. Earth Observatory.

⁴ U.S. Forest Service. (2014). Climate Change Glossary.

⁵ Environmental Protection Agency. (May 2013). Environmental Justice-Related Terms as Defined Across the PSC Agencies.

⁶ BBC News. (April 2014). Climate Change Glossary.

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⁸ BBC News. (April 2014). Climate Change Glossary.

⁹ BBC News. (April 2014). Climate Change Glossary.

¹⁰ Intergovernmental Panel on Climate Change. (2012). Glossary of Terms.

¹¹ Intergovernmental Panel on Climate Change. (2012). Glossary of Terms.

¹² BBC News. (April 2014). Climate Change Glossary.

¹³ ICLEI USA. (2020). Climate Equity.

¹⁴ World Resources Institute. (2020). Climate Equity.

¹⁵ United Nations. (May 2019). Climate Justice. Sustainable Development Goals.

¹⁶ Environmental Protection Agency. (May 2013). Environmental Justice-Related Terms As Defined Across the PSC Agencies.

¹⁷ The Carbon Leadership Forum. (June 2024). Embodied Carbon 101. [LINK]

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- ³⁹ Intergovernmental Panel on Climate Change. (2012). Glossary of Terms.
- ⁴⁰ U.S. Global Change Research Program. (n.d.). Glossary.
- ⁴¹ U.S. Environmental Protection Agency. What Are Heat Islands? | US EPA (n.d.). [LINK]
- ⁴² U.S. Global Change Research Program. (n.d.). Glossary.
- ⁴³ U.S. Global Change Research Program. (n.d.). Glossary.
- ⁴⁴ U.S. Global Change Research Program. (n.d.). Glossary.

Appendix B: 2025 SCAP Operational Energy and Greenhouse Gas Guidance

June 2025



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Purpose

King County has a long history of climate action and reducing greenhouse gas (GHG) emissions in government operations well before 2025. Commitments adopted and put into practice based on the King County Strategic Climate Action Plan (SCAP), starting in 2015, continue to be required for facility operations and maintenance, capital projects, fleet purchasing, and procurement. This document provides a compiled high-level summary of King County government operational guidance and requirements for reducing GHG emissions in capital projects and operations. Departmental staff are encouraged to work with their departmental climate team leads and the Executive Climate Office for further guidance and clarification.

I. Operational Energy: Building Energy Use and Capital Projects

This attachment provides specific guidance in support of the goals included in the Buildings and Facilities Energy Focus Area of the Reducing GHG Section of the 2025 SCAP. The specific strategies and policies provided in this attachment are a guide for County government agencies as they advance their County facility energy reduction and renewable energy work.

Background

Energy use in County facilities has significant environmental impacts by driving the need for energy infrastructure and production, and operating cost economic impacts for paying utility bills. Reducing fossil fuel use in County facilities has direct impacts to reduce GHGs and demonstrates for the community ways to transition to a decarbonized economy based on clean sources of electricity.

King County will continue aggressive electricity reduction actions toward future energy reduction goals. There are important benefits to reducing electricity use, even when the electricity provided is carbon neutral or renewable, these include:

- Reducing utility costs to County department operating budgets and expenditures;
- Reducing the County's use of electricity, including carbon neutral Seattle City Light (SCL) power
 or renewable electricity via Puget Sound Energy (PSE) Green Direct. This "frees up" low-carbon
 electricity for the utilities to use for other customers, reducing the need to generate power to
 serve peak demand from higher carbon sources. For example, as of 2023, about half of PSE's
 power systemwide is carbon-based and SCL's ability to sell its carbon neutral power to others
 reduces the need for others to generate power with natural gas;
- Minimizing the need for new electricity generation construction. All new generation, including renewable sources, has environmental impacts, including raw material mining, power equipment manufacturing, land use, and habitat loss.

Operational Energy Requirements

- No new natural gas or fossil fuel powered equipment installed in County facilities, with
 exceptions for generators and specialized equipment where an all-electric version is not
 feasible. At least one all-electric option must be included in alternative analysis for capital
 projects and include cost of carbon in lifecycle cost assessments. (See also GHG 72: Limit
 installation of new fossil fueled equipment in County facilities)
- Acquire utility incentives and rebates: King County capital projects with energy components
 must apply for utility rebates when available. All County agency energy-using equipment
 replacement projects shall maximize available utility rebate dollars by working with PSE, SCL,
 Snohomish PUD, Seattle Public Utilities, and other utility companies as appropriate. This
 requirement helps reduce project costs and supports utility conservation incentive programs

- that have been a critical component of the region's long-term success as a national leader in resource efficiency efforts.
- Meet most progressive energy code regardless of jurisdiction: All capital and major renovation projects that trigger code requirements shall meet the energy performance of the most efficient commercial energy code of any jurisdiction in King County. As of early 2025, the most efficient energy code is in the City of Seattle.
- Design systems to be turned off: New facilities and major renovations shall be designed such
 that all non-critical energy using systems are shut off during unoccupied times, with simple
 controls as necessary for safety, code requirements, and accessible overrides for after-hours
 access. Outdoor lighting shall include controls such as motion sensors that will minimize and/or
 shut down lighting when no activity is present. Exceptions shall be rare and shall include a clear
 public or staff benefit, such as public or staff safety, or when doing so would result in increased
 energy use.
- Ensure design guidance prioritizes energy efficiency: Energy-using equipment design guidance for capital projects shall communicate design standards as indicated in the bullet points and sections below with regard to lighting efficiency levels, purchase of Energy Star-qualified appliances, heat pump efficiency levels, heat recovery installation, and space heating control and efficiency standards. If these requirements are met in existing design requirements, then additional guidance is not necessary.
- Minimum design requirements: Dictating the use of specific energy equipment technologies has
 the potential to limit creative design and create an unanticipated outcome of increased energy
 use, if newer technological advances do not fit the prescribed standards. However, advancing
 technological improvements are making some older or inefficient technologies obsolete or
 unattractive from a life cycle perspective. New construction and renovation projects shall meet
 the following minimum design requirements:
 - All lighting fixtures shall have an efficacy of over 110 lumens per watt, unless replacing existing lighting results in an energy reduction of 50 percent or greater for each lamp replaced.
 - o Renovation projects shall replace heating equipment with a non-fossil fuel option, per the requirements of the "No New Natural Gas..." section above.
 - Heat pumps shall have a Coefficient of Performance of at least 2.5, unless the total space to be heated with such equipment is under 400 square feet.
 - Space to be conditioned shall be minimized and based on specific needs. Strong consideration shall be given to stairwells and other low-use spaces being constructed as outdoor and/or unconditioned space.
 - All space heating devices shall be controlled with a minimum of seven-day programmable wall thermostats that are not integrated into the device. This includes restrooms and all other conditioned spaces. That is, no baseboard or in-wall heaters controlled by on/off or dial switches integrated into the units.
 - Radiant heaters shall have timer or motion shutdown controls.
 - Heat recovery shall be integrated into all ventilated spaces over 5,000 square feet and shall have heat recovery of 70 percent or greater, where allowed by code.
 - No electric boilers as primary heat source. Electric boilers can be integrated only as back-up heating systems, secondary to heat pump or other higher efficiency systems, and designed to operate for no more than 200 hours each year.
 - Agencies shall, as necessary, integrate wording into construction and procurement documents to ensure these strategies are followed.

- Purchase Energy Star qualified appliances: All appliance purchases by King County government shall be Energy Star qualified appliances, if an Energy Star rating is available for the type of appliance. Agencies shall set in place practices to ensure that credit card (i.e., P-card) purchases of equipment and appliances comply with this requirement. To ensure both safety and resource efficiency, employees are not allowed to bring, or accept donations of, heaters or other electrical appliances for use in County facilities, unless specifically approved by the County. When an energy-using device is deemed necessary for an employee's comfort or to perform assigned work, appliances will be purchased by County agencies and shall be Energy Star qualified, if an Energy Star category exists. The Procurement and Payables (P&P) Section of the Department of Executive Services shall work to ensure compliance with this strategy.
- **Design for and install solar PV**: Design for solar electricity generation and install or make-ready for solar energy on all new construction of King County buildings. For all new King County facilities regardless of the jurisdiction of the facility location, install solar power that meets or exceeds the most progressive commercial solar installation code in the County, which is the 2018 City of Seattle code, section C411 and C412, as of early 2025. New facilities shall also design for solar orientation and minimizing obstructed rooftop areas to provide for solar installation during construction or in the future.

II. Green Building: Sustainability Requirements for Capital Projects

Background

Capital projects are uniquely positioned to impact King County's long-term sustainability, equity, and resilience goals because of the way that they intersect with our local environment, communities, residents, and economy. Capital projects have the power to counter historic disparities, influence the future of the County's infrastructure, carbon footprint, green job economy, material resource management, water quality and habitat health, preparedness for a changing climate, and enhance the sustainability and resilience of frontline communities. This attachment outlines requirements per the SCAP, as well as requirements established in King County Code 18.17 – Green Building Ordinance (GBO).

King County's green building policy was established by Executive Order in 2001 and codified in King County Code by the GBO in 2005, covering all County-owned capital projects. The GBO ensures the planning, design, construction, remodeling, renovation, maintenance and operations of any King County owned or financed capital project is consistent with the latest green building and sustainable development practices. It directs County departments to incorporate the use of green building rating systems in project design for a holistic sustainable approach toward equitable, restorative and carbon neutral development. The <u>Sustainable Infrastructure Scorecard</u> is a GBO reporting requirement where capital projects must account for their green building elements.

Green Building Requirements

- **Building Certification:** Buildings owned or lease-to-own by King County, shall achieve certification levels as follows:
 - New construction of a Leadership in Energy and Environmental Design (LEED)-eligible building shall achieve either: LEED platinum certification or the Living Building Challenge certification, or both; and
 - LEED Platinum plus Zero Energy or Zero Carbon certification; or
 - Living Building Challenge CORE plus Zero Energy, Energy Petal, or Zero Carbon certification.

- A major remodel or renovation of a LEED-eligible building shall achieve either LEED gold certification or the Living Building Challenge certification, or both.
- Infrastructure Certification: Capital projects owned or lease-to-own by King County that are large scale infrastructure or site related projects, including: new construction of conveyance, combined sewer overflow and pump station projects from the wastewater treatment division; new RapidRide and bus base electrification charging infrastructure projects by Metro Transit; and heavy-duty electrical infrastructure projects with 10 or more DC fast chargers by the solid waste division, shall achieve Envision Platinum certification. Capital projects owned or lease-to-own by King County that are large scale infrastructure or site-related projects by the Parks and Recreation Division, that are not subject to other requirements, shall achieve or maintain Salmon Safe certification.
- Sustainable Infrastructure Scorecard or Additional Certification: Capital projects owned or lease-to-own by King County that are not subject to above requirements shall either achieve a platinum rating according to a King County or Division-specific Sustainable Infrastructure Scorecard or achieve certification through an applicable alternative green building rating system, or both.

All capital projects:

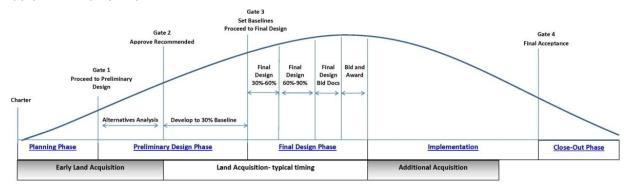
- Shall meet King County Surface Water Design Manual requirements, regardless of jurisdiction location. If a project is located in a jurisdiction where the surface water design manual standards and requirements are different than King County's, the project shall implement the more stringent requirement;
- Shall achieve a minimum diversion rate of 85 percent for construction and demolition (C&D) materials and shall achieve zero waste of resources with economic value beginning in 2030;
- Shall achieve applicable King County equity and social justice credits for capital projects regardless of the rating system used, and
- Should use the practice of integrative process to maximize green building, sustainable development, community benefit and financial investment opportunities over the life of the asset.

Leased Facilities:

- For leases by a King County agency for King County operations at non-King-Countyowned facilities, the agency shall seek to incorporate the latest green building and sustainable development practices in the County-occupied space.
- For new leases of King County-employee-occupied-space of longer than five years, including lease-to-own projects, King County shall lease buildings that are certified through the LEED rating system at silver level or higher, are Energy Star Certified or are certified through an alternative green building rating system, but only when those ratings are consistent with the operational needs of the function. Buildings that do not meet these standards can be leased by the county if plans and financing are in place at the time of signing that will enable the building to meet this standard within twenty-four months of lease signing.
- **Exemptions:** Projects are only exempt from the Green Building Ordinance if they can confirm one of the following situations:
 - Parent/Child (e.g., project itself has no construction, reporting occurs via subprojects);
 Administrative/Finance project not owned by King County (e.g., central charges, debt service):
 - Study/Report/Assessment only (e.g., strategic plans, compliance report);
 - No construction/other (e.g., security and fire alarm systems);

- Acquisition Only (e.g., property purchase);
- IT/Software/Programming (e.g., computers or software);
- Project on Hold;
- o Project Reassigned.

The following summarizes the key requirements of the County's sustainability and ESJ mandates as they apply to each project phase.



- **Project Initiation:** Scope project budget to meet GBO and SCAP requirements, including sustainable rating system project required to achieve.
- Planning Phase: Include sustainable rating system the project will utilize in the project charter.
 - Determine who on the project team is responsible or accountable for the sustainability requirements.
 - In consultant procurement documents, include applicable SCAP, Clean Water Healthy Habitat (CWHH), ESJ, GBO and SCC language/requirements to ensure that these items are accounted for in baseline budget. Include elements in all consultant procurement documents: Request for Proposal, Contract, Scope, Level of Effort Budgets, and Specifications.
 - At early-stage design meetings, review Annual Green Building Report, green building rating system checklist, C&D plan and report templates, include deconstruction assessment so that project team is aware of all reporting criteria that are required.
 Complete Annual Green Building Report each year project is active.
 - At early-stage design meetings, identify what types of climate change impacts may affect the project and incorporate planning for these impacts into scoping and planning.
 For example, is the project boundary in a floodplain? If yes, the project team would need to incorporate flood considerations in its design.
 - Evaluate the project's opportunities to achieve net zero GHG emissions, build applicable elements into project baseline; by 2030, 100 percent of new construction and whole building renovations must achieve net zero GHG emissions.
 - Review six CWHH goals and identify opportunities to achieve multi-benefits within the project across reduced toxins, cleaner controlled stormwater, resilient marine shorelines, functional floodplains, better fish habitat and expanded forest and greenspaces.
 - Plan and hold an eco-charrette to brainstorm all sustainability and climate resilience opportunities for project. This should cover opportunities to implement intent and priority actions of GBO, 2020 SCAP, CWHH, ESJ.

- Review ESJ credits for capital projects. Start developing ESJ Plan for project to capture what ESJ credits will be pursued and what strategies and task will be needed to achieve ESJ credits.
- Preliminary Design Phase (<30 percent Design): During alternatives analysis, use Life Cycle Cost
 Analysis, social cost of carbon calculation, and embodied carbon impacts in capital planning,
 alternatives analysis, selection of construction materials, and other large investments.
 - Integrate the most efficient energy and water codes in the County into project design, regardless of facility location.
 - Complete a 30 percent Sustainable Infrastructure Scorecard/LEED/Alternative Rating System checklist and C&D Plan. All projects must: Achieve a Platinum rating using the King County Sustainable Infrastructure Scorecard, the LEED rating system, or an approved alternative rating system
 - Complete a 30 percent Compost Plan to account for potential compost utilized on the project.
 - o Ensure applicable ESJ credits are being pursued. ESJ Plan has been created.
 - Create a plan to reach a minimum of 85 percent C&D waste diversion from landfills; and zero waste of resources by 2030. Conduct a deconstruction assessment to maximize source separation of materials.
 - Develop an energy model to estimate the annual energy use of the facility, based on specified equipment and assumed operating conditions.
 - As a part of creating the project's baseline budget, evaluate climate change impacts on the proposed project and project alternatives. Identify what project modifications may be needed to mitigate those impacts and what the cost of those modifications will be.
 Build those costs into the baseline.
- Final Design Phase (Post 30 percent design bid and award): Ensure project Baseline budget includes ability to achieve all sustainability requirements.
 - Update energy models, ESJ plans, green building checklist to ensure design is on track. Is the project meeting Platinum? Is the project prepared to divert at least 85 percent C&D materials from landfills? Is project meeting energy, emissions, water reduction targets of 2025 SCAP? Is the project meeting CWHH goals? Is the project implementing efforts in the ESJ plan?
 - Write specifications and construction bid documents to reflect sustainability requirements – 2025 SCAP, CWHH, ESJ and GBO. Ensure this includes sustainable materials, low embodied GHG materials, pro-equity sourcing.
 - If needed, complete a more detailed evaluation of climate change and equity impacts on the preferred alternative and update any project modifications that may be needed to mitigate those impacts. Ensure project Baseline budget includes funds needed to implement climate preparedness measures.

Implementation/Construction Phase:

- Divert a minimum of 85 percent of C&D waste from landfills during capital phase and zero waste of resources by 2030.
- Track if sustainability materials are being used and verifying specs are being followed.
 Quantify cement and cement substitutes used. Quantify compost used.

Track and quantify use of apprentices and Small Contractors and Suppliers (SCS) firms.
 Capture demographic data of performance and benefits.

• Close-Out Phase:

- o Incorporate sustainability in operations and maintenance documents when the project is completed and turned over to Operations and Maintenance groups.
- Complete a final Sustainable Infrastructure Scorecard/LEED/Alternative Rating system checklist and C&D Report. All projects must:
 - Achieve a Platinum rating using the King County Sustainable Infrastructure Scorecard, the LEED rating system, or an equivalent level using an approved alternative rating system.
 - Document actual performance of implementing ESJ credits.
 - Reach a minimum of 85 percent C&D waste diversion from landfills and zero waste of resources by 2030.
- Complete a final Compost Report to report on vendor, quantity, and type of compost used on the project.
- Quantify actual performance for criteria in Annual Green Building Report energy savings, water savings, emissions savings, C&D diversion percentage and tonnage, FSC wood, cement substitutes, carpet.

III. Sustainable Purchasing Policy and Guidance

Background

King County Government has made a commitment to sustainable purchasing practices to reduce its environmental and human health impacts and promote socially responsible procurement. The purpose of the Sustainable Purchasing Policy is to ensure purchases of sustainable goods and services whenever they meet performance and availability requirements, price is not prohibitive, and they advance environmental sustainability goals and priority actions of the King County Strategic Plan, Strategic Climate Action Plan, Green Building Ordinance, Equity and Social Justice Strategic Plan, and Pro-Equity Contracting Executive Order. The Sustainable Purchasing Executive Policy CON 7-22-1EP, KCC 18.20 Sustainable Purchasing Guide require all County employees to follow these purchasing requirements when making any purchase, including the use of environmental standards, certifications and ecolabels, and outline the roles and responsibilities of personnel involved with the specifying and buying of sustainable goods and services.

Sustainable Purchasing Requirements excerpts per the Sustainable Purchasing Policy

Agencies shall purchase goods and services in a manner that protects human health and the environment, is fiscally responsible, and promotes social equity and other benefits to the community. Agencies shall consider life-cycle costs in addition to lowest initial cost of a good or service. Agencies shall include steps in their procurement planning process to meet the directives of the environmental, social, and fiscal impacts in this policy. The requirements and recommendations within this policy apply to all purchasing mechanisms per KCC 2.93.

1) The following environmental benefits shall be evaluated and prioritized for purchasing decisions:

- a) Reducing waste generation by choosing products that are durable, reusable, repairable, refillable, recyclable, compostable, salvageable, deconstructable, or made with recycled content or remanufactured parts;
- b) Lowering embodied GHG emissions associated with a product's manufacture, transportation and use;
- c) Saving energy through the purchase of energy-efficient products and equipment and increasing the use of renewable energy such as solar or wind power;
- d) Conserving natural resources including water, petroleum, rare earth minerals;
- e) Minimizing the purchase of products containing toxic chemicals, especially perfluoroalkyl and polyfluoroalkyl substances (PFAS) and persistent, bioaccumulative, and toxic chemicals (PBTs), with a goal of phasing out all usage of products containing such chemicals;
- f) Minimizing pollutants to air and water, including indoor air emissions;
- g) Promoting transparency, including disclosure of environmental, health, economic, and social risks through the use of environmental certifications and ecolabels (as defined in Section D of this policy), Environmental Product Declarations (EPDs), Health Product Declarations (HPDs), and vendor sustainability ratings, and
- h) Other environmental impacts that may be relevant or indicated in the <u>Sustainable Purchasing</u> <u>Guide</u> including best practice guidance for choosing plant-based foods for office catering.
- 2) The following social benefits shall be evaluated and prioritized for purchasing decisions:
 - a) Using products that contain non-toxic or safer chemicals and do not contribute adverse human health or environmental impacts during their manufacture, use, or disposal;
 - b) Using vendors and eco-labelled products that promote labor and human rights, including those certified as fair trade, sweatshop-free, or made without child labor, and
 - c) Using pro-equity contracting, including Small Contractors and Suppliers (SCS), Minority and Women's Business Enterprises (M/WBE) vendors.
- 3) The following fiscal benefits shall be evaluated and prioritized for purchasing decisions:
 - a) Reducing consumption by choosing reusable and repairable products, and leasing or renting, rather than buying;
 - b) Ensuring performance, durability, and quality of products to maximize the useful life of assets;
 - c) Accounting for all costs that are based on a total cost of ownership (TCO), life cycle cost assessment (LCCA) including social cost of carbon, and
 - d) Leveraging the County's and other public entities' buying power to increase access to sustainable materials and products by using existing partnership agreements (i.e., piggybacks and cooperatives) and seeking opportunities to create new partnerships.

Sustainable Purchasing Strategies and Requirements

- Goods and Services: Agencies are required to purchase goods and services using the following:
 - o Refer to P&P "Sustainable Purchasing Guide," which:
 - Requires and recommends standards, certifications and ecolabels by goods and services;
 - Identifies County contracts that include sustainable goods and services; and lists requirements of County policies including those identified in the SCAP, Executive Orders, and County Code related to sustainable purchasing.

- o Refer to the following State policies and guidance:
 - Use of recycled aggregates develop and establish objectives and strategies for the reuse and recycling of construction aggregate and recycled concrete materials (RCW 70A.205.700);
 - Avoid the purchase of expanded polystyrene products, except for when necessary for drugs, medical devices, and biological materials (RCW 70A.245);
 - Use of non-compostable plastic trash bags with a minimum of 10 percent recycled content (RCW 70A.245), and
 - Avoid the purchase of products containing intentionally added PFAS and other PBT chemicals, unless there is no feasible alternative (WA State EO 04-01, WA State EO 20-01).
- **Reduce Consumption:** Use strategies to reduce consumption, including:
 - Reuse, repair, and repurpose goods and materials; purchase goods that are durable and long-lasting; purchase of goods with minimal packaging;
 - Utilize manufacturer's take-back programs;
 - Purchase of recyclable and/or recycled products;
 - Purchase of salvaged or deconstructed materials;
 - Life-cycle cost assessment that accounts for raw material extraction, manufacturing, packaging, distribution, use, maintenance; and disposal of the product, including environmental and social costs; social cost of carbon; and
 - Consider the quality, durability, and repairability of purchased goods to make choices that maximize the useful life of assets.

Environmental Standards and Certifications

- Environmental Standards: Agencies must evaluate available environmental standards, certifications, and ecolabels when conducting alternatives analysis and/or writing specifications for procuring goods.
- Environmental standards used by the agency must meet one of these three measures:
 - Federal Guidance "Recommendations of Specifications, Standards, and ecolabels"
 - Third Party Certifications that:
 - Were developed and awarded by an impartial third-party;
 - Were developed in a public, transparent, and broad stakeholder process; and
 - Satisfy the standards for certification developed by the International Organization of Standards or other recognized standards-setting or accreditation organizations.
 - Sustainable purchasing guidance from P&P staff.
- The evaluation should include review of minimum environmental standards, certifications, and ecolabel requirements listed by goods and service categories in the Sustainable Purchasing Guide.
- If the evaluation concludes that there is an appropriate and relevant ecolabel, then they must be included in the specifications.

IV. County Fleet Vehicles: Requirements for Purchasing and Operating County Fleets

Background

King County has established targets to reduce emissions from County fleets. Departments are required to transition to zero-emission and electric vehicles per KCC 18. 22 Electric Vehicles for County. To effectively reduce emissions from County fleets there is a need to limit purchase of new internal combustion fleet, as King County makes this transition. In 2022, King County Executive Order established an Internal Combustion Engine Purchasing Moratorium, to prohibit the purchase of any new internal combustion light duty vehicles, including hybrid vehicles. Pursuit-rated vehicles in the Sheriff's Office are exempted from this moratorium for reasons related to officer safety as long as a comparable hybrid option is purchased, if available to officers. Departments can submit a Waiver-Electric Vehicle Exemption Light Duty Vehicles for approval by the Executive Climate Office if barriers exist requiring purchase of a light duty internal combustion engine vehicle.

County Fleet Vehicles Requirements

SCAP targets:

- All agencies with fleet vehicles are expected to request resources or otherwise budget to meet the SCAP targets in the <u>KCC 18. 22</u> for fleet electrification, including the necessary budget for vehicle purchasing (as appropriate), vehicle charging infrastructure, and the necessary staffing and training for associated planning, programmatic support, and strategic implementation.
- Agencies are also encouraged to pilot and test new technologies in forging the path toward electrification and reduced fleet emissions.
- With the adoption of the Washington State Clean Fuel Standard and reduced incremental costs of alternative fuels, agencies should expand the use of alternative fuels to reduce emissions in the near-term as zero-emission infrastructure is implemented.
- Agencies for whom Fleet Services manages fleet procurement, but manage their own facilities, are responsible for capital planning and delivery of electric vehicle (EV) charging infrastructure to support EVs.
- Agencies should work closely with Fleet Services to identify charging needs and are expected to develop plans for charging infrastructure implementation.
- Internal Combustion Engine Moratorium Waiver: To seek approval for a waiver from the Internal Combustion Engine Moratorium, departments must demonstrate that the following criteria can be met:
 - **Criteria 1:** Vehicle Needs/Critical to Operations:
 - Describe the primary use of the vehicle and why it needs to be purchased. If this is a replacement for an existing vehicle, why does it need to be replaced? (e.g., new program, unforeseen collision, sudden catastrophic vehicle malfunction, other extenuating circumstances). Provide documentation.
 - Criteria 2: No Feasible EV Alternative or No Feasible EV Charging
 - o Demonstrate that no feasible EV alternative can be used to meet this need.
 - Which EV model options were considered? Include a list of the EV options considered and cost analysis if applicable (if TCO over the life of the vehicle is more than 20 percent higher to purchase the EV option, note in this section). Describe why these EV options do not work (i.e., vehicle specs do not meet business needs,

- cost analysis does not support purchase, no charging is available or anticipated to be available in the next 6 months to meet this need).
- Demonstrate there is no charging available and no opportunity to add charging in the next six months to support this need.
- Which plug-in hybrid/hybrid options were considered? List hybrid options considered.
- Criteria 3: No Substitute Vehicle Available
 - Demonstrate that there are no substitute vehicles within the existing King County fleet (e.g., underutilized vehicles) that could be swapped or temporarily utilized for this operational purpose until a viable electric vehicle can be procured. Include any details.
- Criteria 4: No Ability to Electrify and Redeploy a Gas-powered Vehicle
 - Demonstrate there are no similar vehicles in the fleet ready to electrify to allow for redeployment of the gas-powered vehicle to meet this need until a viable electric vehicle can be implemented.

V. Operational GHG Measurement and Reporting Principles

Background

The following principles outline how King County will measure and report on operational GHG emissions adopted in this SCAP. King County develops GHG emissions inventories to inform action and measure progress toward adopted targets. King County's operational emissions are categorized into three "scopes":

- Scope 1 emissions include direct GHG emissions and removals that occur as a part of operations, including fuel combustion from King County-owned vehicles; natural gas used at King County facilities; landfill gas at Cedar Hill Regional landfill; and land use change, including carbon sequestered by forest growth on King County-owned lands.
- **Scope 2 emissions** include indirect emissions associated with the consumption of purchased electricity, steam, heating, and cooling.
- Scope 3 emissions include all other indirect sources of GHG emissions, such as King County
 employee business travel and commuting or the life cycle GHG emissions associated with the
 production, use, and disposal of purchased materials and services. Purchasing is the County's
 largest source of Scope 3 emissions.

Operational GHG Reporting Priorities

For SCAP County operational targets, King County should include all Scope 1 and 2 emissions and removals, consistent with adopted protocols and best practices. Scope 3 emissions are not included in reporting on this target. However, King County is still working to quantify and reduce Scope 3 emissions, for example, by addressing employee commute-related emissions through the Commute Trip Reduction program and by reducing embodied emissions of construction materials like concrete used in County projects.

VI. Operational GHG Emissions, Carbon Offset, and Renewable Energy Policies

Background

King County is committed to reducing operations GHG emissions. There are many strategies and approaches organizations can use to reduce emissions. King County has established guidance on how to prioritize investments in reducing operational emissions. King County is also a large renewable energy producer and seller, has established a Forest Carbon Program, and has established internal carbon fees. There are also opportunities to develop and sell climate and energy related environmental attributes, such as related to vehicle electrification and carbon sequestration strategies. The intent of this section of operational guidance is to:

- Formalize and clarify priorities for GHG emissions reductions;
- Outline the rationale for County sale of environmental attributes;
- Provide dedicated funding to accelerate deeper, faster GHG emissions reductions and climate preparedness benefits, and
- Ensure consistency of approaches across varying lines of business.

Operational GHG Emissions Priorities

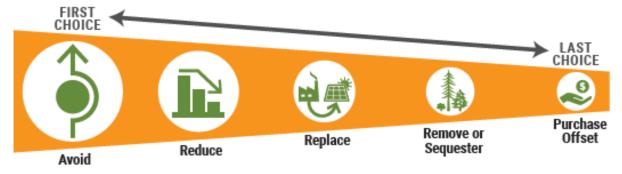
To achieve its operational emissions, energy, and fuel goals, King County prioritizes strategies that:

- Are the most cost-effective;
- Achieve transformative and long term GHG reductions, and
- Advance equity, public health, and other environmental benefits such as clean water and improved air quality.

Investments to reduce operational GHG emissions should be prioritized in the following order:

- 1st: Avoid (e.g. by driving fewer miles in government vehicles).
- 2nd: Reduce (e.g. through energy efficiency projects).
- 3rd: Replace (e.g. through cleaner fuel use in vehicles; by transitioning building energy use from fossil fuel natural gas to electricity; and/or by transitioning electricity supplies to green sources (such as PSE's Green Direct program).
- 4th: Remove or sequester, with a preference for investing in County owned projects (e.g. through forest restoration or soil carbon projects).
- Last: Purchase Offsets. As a final option, and only in certain cases, purchase externally sourced offsets or credits.

Greenhouse Gas Emissions Reduction Tactics



King County should prioritize the use or sale of County energy, carbon offsets and related environmental attributes in the following ways:

- Carbon and energy projects. King County agencies are encouraged to develop renewable energy, carbon offset, and related projects. The internal use of the energy or environmental attributes of the projects is encouraged to help achieve operational climate and energy goals.
- Benefits of sale. King County recognizes that the financial, leadership, public-private partnership, and/or educational values of sale of the energy and carbon and energy attributes may outweigh the benefits of their use towards operational goals.
- Local preference for sale. If the price between potential buyers is close to equal, King County prefers to sell these attributes to local buyers to support local partnerships.
- No double counting. Any renewable energy, carbon offset, or other environmental attributes
 that are sold externally may not also be used to meet the County's operational targets or
 commitments.

Reinvestment in climate action. For County owned projects or programs that sell energy, carbon offsets, or related attributes, revenues beyond project development costs must be reinvested in SCAP related actions.

- Covered revenues. Revenues from the following sales must be reinvested:
 - Renewable energy produced
 - Renewable energy attributes such as Renewable Energy Certificates (RECs) and Renewable Identification Numbers (RINs)
 - Carbon offsets
 - o Internal carbon and energy fees and set asides
 - Credits associated with use of electric vehicles and low carbon fuels
- Reinvestment: revenues should provide additional funding. Reinvestment of revenues from carbon and energy projects is intended to provide additional funding to accelerate climate action and should not displace existing funding for programs that result in GHG emissions reductions and climate preparedness benefits.
- The policy for reinvestment allows for exceptions in cases of financial emergency; is not to affect Rate Stabilization Policies; and is not intended to impact revenues that are subject to requirements of Federal, State, regional and local laws that require minimum investments in specific programs, demographics, or locations.

Appendix C: 2020 SCAP Priority Actions and Performance Measures Update

June 2025



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Purpose

This document serves as a biennial report on progress on the County's climate work as required by King County Code (KCC) 18.50.010.

2020 SCAP Priority Action Overview

The 2020 Strategic Climate Action Plan (SCAP) charts King County's path to reduce emissions, strengthen climate resilience, and advance climate equity. In the 2023 biennial report, of the 243 priority actions, nearly half were complete or ongoing, with most of the remainder in progress and a small number needing attention or not yet started. Since then, steady progress has continued. As of 2025, more than three-quarters of actions are complete, ongoing, or in progress, with fewer needing attention, not started, or stopped — reflecting King County's sustained commitment to climate action, even as the climate landscape continues to evolve.

Each action is assigned an implementation status to track its progress, offering a snapshot of King County's climate work to date, and helping to focus future efforts where they are most needed. The categories below show whether actions are complete, underway, ongoing indefinitely, not yet started, stopped, or needing additional support. **Figure 1** below shows a summary of the 2020 priority action implementation status as of 2025:

Figure 1. Overall status of 2020 SCAP Priority Actions

Total Actions	2025 Implementation Status	Definition
6	Needs Attention	Off track or behind. At risk of not completing by deadline without intervention.
106	Ongoing	Some actions are ongoing and work will continue indefinitely.
71	🚧 In Progress	The work is underway but not yet complete
51	✓ Complete	The priority action is completed.
5	Not Started	Work has not yet begun
4	Stopped	Work was stopped for noted reasons

Each priority action in the 2020 SCAP is also assessed by performance ratings that track progress toward completion. In the 2023 biennial report, the majority of actions (over two-thirds) were rated Green, indicating they were on track or completed, while only a small number were rated Red or Yellow. By 2025, performance ratings showed slight shifts: the number of Green-rated actions decreased slightly from 169 to 155, while Yellow ratings increased from 69 to 74, and Red ratings increased from five to 13. These shifts reflect the growing complexity of some actions as they advance through later stages of implementation, but overall, the majority of SCAP actions remain on track or moving steadily forward.

In addition to reviewing implementation progress, each priority action also receives a performance rating. **Figure 2.** below shows a more detailed summary of the 2025 performance ratings for 2020 SCAP priority actions:

Figure 2. Overall performance ratings for 2020 Priority Actions

Actions	2025 Performance Rating	Definition	
13	Red	Course correction needed or stopped	
74	Yellow	Some risks	
155	Green	On track	

The 2020 SCAP sets priority actions and performance measures within each of the three main sections. These sections are the basis for the tables on the following pages:

• Table 1. 2020 Greenhouse Gas Priority Action Status Reducing greenhouse gas (GHG) emissions is a cornerstone of the 2020 SCAP. Of the 150 GHG priority actions, most were either "in progress" or "ongoing" in 2023, with a smaller share "completed" or "needing additional attention." By 2025, implementation had advanced: "completed" actions rose from 29 to 35, and "ongoing" actions increased from 40 to 61. At the same time, the number of actions "needing attention" dropped from 12 to five, and those "not yet started" fell from two to just one.

Each GHG priority action is assessed through performance ratings that track progress over time. In the 2023 biennial report, most GHG actions were rated "Green," signaling strong momentum. By 2025, the number of "Green" ratings decreased slightly from 94 to 86, while "Yellow" ratings rose from 54 to 60, and "Red" ratings increased from two to four. These shifts highlight where additional focus and resources are needed to maintain progress and address emerging challenges.

• Table 2. 2020 Sustainable and Resilient Frontline Communities Priority Action Status

The Sustainable and Resilient Frontline Communities (SRFC) is a new section that was introduced in the 2020 SCAP to center frontline communities in King County's climate efforts. In 2023, most SRFC priority actions were underway, with 19 "ongoing," eight "in progress," and three "completed." By 2025, the number of "ongoing" actions increased to 23, while two of the three "completed" actions from 2023 were recategorized as "in progress" in recognition of the iterative nature of the work. Additionally, two actions changed in status from "in progress" to "not started" because while initial interdepartmental and external planning conversations had started in 2023, formal work plans and implementation did not occur.

Performance ratings for Sustainable and Resilient Frontline Communities (SRFC) actions highlight both progress and areas for renewed focus. In 2023, most SRFC actions were rated "Green," with no "Red" ratings and six rated "Yellow." By 2025, "Green" ratings declined slightly from 25 to 21, while "Yellow" ratings rose from 6 to 7, reflecting the fact that more actions have moved into early stages of implementation. Three actions were rated "Red," underscoring the need for additional support in a few areas.

• Table 3. 2020 Climate Preparedness Priority Action Status

Preparing for Climate Change (PREP) is the third and final section of the 2020 SCAP, focused on building resilience to climate impacts across King County. In 2023, the majority of PREP priority actions were in progress (37), with a smaller number ongoing (seven) or complete (eight), and 10 actions not yet started. By 2025, significant movement had occurred: ongoing actions increased from seven to 22, completed actions rose from eight to 15, and the number of not started actions fell from 10 to two. Four actions were classified as stopped, reflecting shifts in priorities or external factors. Overall, the PREP section shows strong momentum, with many actions transitioning from planning into active, sustained implementation.

Similarly, in terms of performance – most PREP actions were rated Green in 2023, with three Red and nine Yellow ratings. By 2025, Green ratings remained high at 49, Yellow ratings decreased from nine to seven, and Red ratings rose slightly from three to six. While a few actions now require additional attention, the overall stability in Green ratings shows that most PREP efforts are on track.

The set of three tables on the following pages provides more details on the implementation status and performance ratings of the priority actions established by King County in its 2020 SCAP. Data that has been updated since reported in 2023 Biennial Report is noted with an asterisk (*).

Table 1. 2020 Greenhouse Gas Priority Action Status

Action #	2020 SCAP Priority Action	Status	Additional Information
GHG 1.01.01	Advocate for comprehensive federal, regional, and state science-based limits and a market-based price on carbon pollution and other GHG emissions. A portion of revenue from these policies should support local GHG reduction efforts that align with the King County-Cities Climate Collaboration (K4C)'s Joint County-City Climate Commitments, such as funding for transit service, renewable energy and energy-efficiency projects, green building, and forest protection and restoration initiatives.	2023	King County advocated for and convened K4C partners to support legislative action in Washington state for carbon pricing policies. In 2021, the Washington State Legislature adopted the Climate Commitment Act and Clean Fuel Standard. King County was actively engaged in the rulemaking process for developing both policies from 2021 through when the policies went into effect in 2023. Key issues included the effectiveness of the policies are reducing greenhouse gas emissions, ensuring the policies are implemented equitably and deliver benefits to communities on the frontline of climate impacts, as well as ensuring funding support for local climate projects and programs.
		2025	King County has continued to advocate and convene K4C and other partners to support legislative action in Washington state for comprehensive and market-based approaches to reduce GHG emissions. Key issues have included ensuring revenue from policies is reinvested to support mitigation efforts and ensuring the policies equitably deliver benefits for frontline communities.
GHG 1.01.02	Strengthen long-term countywide GHG targets to reflect public input and science. In light of public input that the County's target should be strengthened, emerging science of what is needed globally to avoid the worst climate impacts, and reflecting new statewide targets, King County commits to work with cities and partners to analyze pathways to more ambitious targets, including a 2050 carbon neutral target, and to develop recommendations to shared GHG reduction targets as part of the next update to Countywide Planning Policies, planned for 2021.	2023	King County partnered through the K4C and Growth Management Planning Council to support development and ratification of shared, strengthened countywide GHG emissions reduction targets. The targets are formalized in Countywide Planning Policy EN-27 and EN-29, as ratified in April 2022 and adopted by King County Ordinance 19384. The most impactful changes were to strengthen the 2050 target to a 95 percent reduction target, including net-zero emissions through carbon sequestration and other strategies, commit to evaluate and update these targets over time to keep global warming under 1.5 degrees Celsius, and update policies around measurement and public reporting on progress to these targets. The 2024 King County Comprehensive Plan proposes updates to King County's policies to align with the Countywide Planning Policies. The updated targets will direct the level of ambition and impact of County policies and investments to reduce GHG emissions.
		2025	See 2023 Update.
GHG 1.01.03	Quantify and develop pathways to achieve GHG targets for consumption-based emissions. To support broader and deeper GHG reduction strategies, King County commits to develop a consumption-based GHG emissions wedge analysis that charts out key pathways and strategies to achieve deep reductions in consumption-based GHGs for both countywide and operational emissions, in alignment with existing GHG emission reduction targets.	2023	The Puget Sound Regional Emissions Analysis (PSREA) project developed pathways and strategies to achieve deep reductions in consumption-based GHGs for both countywide and operational emissions. The analysis found that reducing and shifting consumption plays an important role in reducing household carbon footprints and the transition to global net zero emissions. Specifically, at the countywide scale, the analysis found that: (1) existing policies will help reduce consumption-based emissions ~30 percent by 2050; (2) changes in household consumption could achieve another ~25 percent reduction by 2050; and (3) another >40 percent of emissions could be reduced through choosing lower-carbon suppliers and decarbonizing supply chains.
		2025	King County will complete an update of consumption-based GHGs for countywide emissions in 2025.
GHG 1.01.04	Partner with Puget Sound Regional Council (PSRC), the Puget Sound Clean Air Agency (PSCAA), K4C, and other partners to advocate for a regional approach to aircraft transportation planning in the Puget Sound that reduces aircraft GHG emissions. As part of the work King County will 1) share comprehensive data about local and regional aircraft GHG emissions, 2) partner with the PSCAA and the PSRC to expand aviation sector GHG emissions accounting to develop a more comprehensive accounting and transparency for Kitsap, Pierce, and Snohomish counties.	2023	As part of the PSREA project, King County led work to better quantify the full magnitude of GHG emissions associated with air travel across the region. Attributing aviation emissions to a particular community can be challenging because aviation fuel is often burned outside the geographic boundary of a county. To be as comprehensive as possible about emissions from the aviation sector, four separate approaches quantified these emissions: (1) a "landing and takeoff" analysis, estimating only emissions that occur within King County; (2) a passenger-based approach, looking at all aviation fuel sold in the Puget Sound region and attributable to King County residents or visitors; (3) emissions from all fuels sold at King County International Airport (KCIA) and SeaTac airport, and (4) a consumption-based approach, estimating aviation emissions from King County residents that may occur anywhere in the world. See Priority Action 1.02.01 for details about the PSREA project's partners.

Action #	2020 SCAP Priority Action	Status	Additional Information
	, , , , , , , , , , , , , , , , , , ,	2025	King County has incorporated the passenger-based approach for quantifying aviation GHG emissions in the 2022 and 2023 overall countywide GHG inventory updates. In order to provide comprehensive accounting of aviation emissions, the final GHG inventory reports will provide quantification of aviation emissions via each approach.
GHG 1.02.01	Assess and publicly report on countywide GHG emissions associated with resident, business, and other local government activities; and conduct countywide GHG inventories that quantify all direct local sources of GHG emissions as well as emissions associated with local consumption, consistent with King County Comprehensive Plan Policy E-202.	2023	Completed in 2022, King County led the PSREA project that provides comprehensive GHG emissions data and innovative tools to advance local climate action for central Puget Sound cities and counties across King, Kitsap, Pierce, and Snohomish counties. The project was in partnership with K4C; Kitsap County; Pierce County; PSCAA; PSRC; the City of Seattle; and Snohomish County.
		2025	King County updated the countywide GHG inventory for King County, all 39 cities in King County, and unincorporated King County for 2022 and 2023. Work to update the consumption-based inventory is underway and will be completed in 2025. King County is collaborating with PSCAA to support the four-county region 2022 GHG inventory.
GHG 1.02.02	Renew the consumption-based emissions inventory and develop a community toolkit to drive action. When King County residents, businesses and governments purchase and use products and services, there are emissions from their manufacture, transport, use and disposal that occur across the world. A consumption-based inventory estimates all emissions no matter where they physically occur, giving a comprehensive emissions picture. This information can be used to inform targeted actions to reduce consumption-based	2023	As part of the PSREA project, King County updated consumption-based emissions inventories – both at the countywide scale and for government operations. The project also developed pathways that detail key pathways and strategies to achieve deep reductions in consumption GHG emissions. See additional details in GHG 1.1.3. Work is underway to develop a community toolkit to drive action to reduce consumption GHG emissions.
emissic invento and, by choosii unders	emissions. By 2021, King County will update consumption-based emissions inventories — both a the countywide scale and for government operations — and, by 2022, develop a new online toolkit providing ideas and guidance on choosing low-carbon, pro-equity healthy products and services so everyone can understand and play their part in reducing global consumption-based emissions.	2025	King County's Consumption Emissions Toolkit will launch in Q3 2025 as an online resource The guide is designed to support individual actions to reduce emissions associated with consumption of goods and services. The toolkit is organized into four target categories, informed by the PSREA project and the King County Communitywide Consumption-Based GHG Emissions Inventory.
GHG 1.02.03	Convene Joint Aircraft Emission technical and Community Task Force. The purpose of this task force is to centralize and disseminate data that will aid King County in effectively measuring aircraft GHGs and creating policies that may reduce aircraft GHG in impacted communities. The task force will consist of technical experts, climate action organizations, impacted communities, local government agencies, public health, and Board of Health representatives, airport representatives from KCIA, Renton Airport, and SeaTac Airport. By the end of 2022, the task force shall complete the following: 1) Review various	2023	The Executive's Office convened a Joint Aircraft Emission Technical and Community Task Force with broad representation from technical experts, climate organizations, communities, King County Public Health, the Board of Health, and airport representatives. King County's climate staff worked with the task force to update the County's methodology for aircraft emissions as part of the PSREA project (See Priority Action 1.02.01). The Task Force also worked with the Executive Office and climate team staff to evaluate strategies to reduce aircraft emissions and developed findings and recommendations as part of a summary report released in early 2024.
	methodologies to accurately account for aircraft emissions in King County's GHG emission inventories and recommend a baseline aircraft emission level to include King County's emission inventories and recommend a baseline aircraft emission to be reported in the 2023 biennial SCAP progress report. 2) Evaluate effectiveness and feasibility of strategies to reduce aircraft emissions.	2025	See 2023 Update. The King County - <u>Joint Aircraft Emissions Technical & Community Task Force Report</u> was finalized in 2023.

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GHG 1.02.04	Update King County's 2020 SCAP emissions reductions targets, including the GHG pathways "wedge" analysis to specifically include a target for reducing emissions form aircraft. The target shall be developed by the Public Health Climate Action Team and King County's interdepartmental Climate Action Team in consultation with the Joint Aircraft Emission Technical Community Task Force, Climate Equity Community Task Force (CECTF), and reviewed by the Board of Health.	2023	The PSREA project (see also GHG 1.01.04 and GHG 1.02.01) identified a set of plausible targets and scenarios across all GHG emissions sectors that cumulatively would achieve countywide GHG emissions reductions of 50 percent by 2030, 75 percent by 2040, and 95 percent by 2050, compared to a 2007 baseline. However, the PSREA project did not define or make binding recommendations for updates to the SCAP's existing GHG targets and pathways. The PSREA scenarios were developed based on staff and consultant subject matter expertise but are only one possible path of many, to achieve overall GHG reduction targets. A wedge modeling tool was also developed to support exploration of alternative scenarios. For the aviation sector, the PSREA identified two new pathways: (1) to decarbonize aviation fuels (percent reduction in fuel carbon intensity) by 20 percent by 2030, 55 percent by 2040, and 95 percent by 2050, and (2) to reduce air travel (percent reduction in aviation fuel use) by 20 percent by 2030, 23 percent by 2040, and 25 percent by 2050. These pathways could only be achieved through actions of many partners. In 2024, King County staff will work with partners to define the new GHG pathway based on the wedge modeling analysis.
		2025	King County updated the wedge analysis in support of the 2025 SCAP development. The wedge analysis estimates GHG emission reductions from the aviation sector, based on Air Transport Action Group goals – Fueling Net Zero: How the aviation industry can deploy sufficient sustainable aviation fuel to meet climate ambitions. The Joint Aircraft Emission Technical Community Taskforce report, guided 2025 priority action development for the aviation sector.
GHG 1.03.01	Expand use of King County's operational cost of carbon. King County will continue to use a cost of carbon to evaluate GHG reduction related projects and will continue to use internal carbon and energy fees, in certain cases, to help incentivize and fund energy and GHG reduction projects. King County will refine its application of a shadow cost of carbon, including for use in capital project planning, selection of construction methods and materials, and other large investments. The dollar value (\$74 USD in 2020) to be used for a shadow cost of carbon will be defined by Washington State's Utilities and	2023	Guidance on how and when to incorporate a social cost of carbon was developed in 2020 and 2021. This guidance suggests that programs use the social cost of carbon when it is the most impactful, during alternatives analysis for major capital investments that have the potential to embed carbon emissions in county operations for decades to come. The social cost of carbon was also incorporated into the King County Sustainable Infrastructure Scorecard update. There is still an opportunity to further implement the guidance and familiarize capital programs with how to incorporate the social cost of carbon. The evaluation of internal carbon and energy fee programs will begin in 2024.
	Transportation Commission, which also sets values used by Washington's energy utilities to comply with the Washington State Clean Energy Transformation Act. Additionally, in 2022, King County will evaluate and recommend updates, as needed, to the internal carbon and energy fee programs established by Fleet Services, Facilities Management Divison (FMD), and Department of Natural Resources and Parks (DNRP).	2025	Agencies continue to use a cost of carbon to evaluate GHG related decisions, as possible. For County green building projects, the cost of carbon is included in the County's Life Cycle Cost Assessment (LCCA) tool to inform decisions about project alternatives and designs. A second example relates to Construction and Demolition (C&D); this program has used a cost of carbon to demonstrate potential monetary value of GHG reductions resulting from C&D material reduction, reuse, and recycling. More broadly, the Solid Waste Division (SWD) recently used a cost of carbon in its Re+ forecast (Re+ is King County's approach to keeping valuable materials out of the landfill), using the value to estimate the impact of GHG emission reductions from different Re+ actions.
GHG 1.03.02	Establish GHG emissions, carbon offset, and renewable energy policies. The 2020 SCAP includes new principles and policies to guide the County's operational GHG emissions reduction strategies and the use, purchase, sale, and reinvestment of carbon offsets and renewable energy generated by King County government. See Strategy A.16 in the Appendix V: Operational Energy	2023	The 2020 SCAP formalized King County's GHG emissions, carbon offset, and renewable energy policies (see Strategy A.16 in Appendix V). This included new principles and policies to guide the County's operational GHG emissions reduction strategies and the use, purchase, sale, and reinvestment of carbon offsets and renewable energy generated by King County government.
	and GHG Guidance.	2025	See 2023 update

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GHG 1.03.03	DNRP, including the Wastewater Treatment Division (WTD), SWD, Parks and Recreation Division, and Water and Land Resources Division (WLRD), shall achieve at minimum net carbon neutrality on an annual, ongoing basis.	2023	DNRP continues work to reduce operational GHG emissions. Examples of WTD and SWD actions are provided in Priority Action 1.03.03. Additional actions include department wide use of green electricity through the Puget Sound Energy (PSE) green direct program; new solar installations at multiple DNRP facilities such as the Vashon Island and Enumclaw Transfer and Recycling Stations; and work to reduce the embodied carbon of construction materials, with a focus on concrete and cement. The department is also exploring how to update its GHG accounting approach to align with evolving best practices and the operational GHG measurement principles detailed in Strategy 17 of the 2020 SCAP.
		2025	Building on analysis previewed in the 2023 Biennial Report, DNRP, WTD, and SWD have developed proposed updates to this work to align with best practices and 2020 SCAP GHG measurement principles. The proposed updates are included in the propose 2025 SCAP and refocuses these agencies' GHG emissions work on decarbonization and accelerating SWD and WTD projects that reduce direct sources of emissions. The proposed updated carbon reduction approach is detailed in 2025 SCAP Priority Action GHG 74.
GHG 1.03.04	WTD and SWD shall each independently achieve carbon neutral operations by 2025.	2023	WTD and (SWD each continue work to reduce operational GHG emissions. As described in Priority Action 1.03.03, DNRP and its divisions are also evaluating how to update their carbon neutrality approach to ensure they continue to make meaningful progress. 2020-2023 example actions by the SWD at the Cedar Hills Regional landfill included installing new landfill gas precision valves; piloting new automated landfill gas system management equipment, and cover system repairs to Area 6 of the landfill that help limit fugitive methane emissions. SWD also installed dual-phase (gas and liquid-collecting) wells to improve landfill gas (LFG) recovery and will be installing more in the following years. 2023 example actions by WTD include that the division eliminated natural gas use at its East Marginal Pump Station and completed design of the South Plant Biogas and Heat Systems Upgrade Project to install electric heat pumps and high-efficiency condensing boilers to reduce natural gas use, to be completed in 2024.
		2025	For the SWD, additional actions beyond those referenced above include: increasing the use of renewable diesel to fuel trucks; installing nearly 1 MW of solar at SWD facilities; and continuing to increase waste diversion strategies that help reduce countywide GHG emissions. For the WTD, additional actions beyond those referenced above include: increasing the use of renewable diesel use in LOOP trucks; installing more than 300 kW of solar at WTD facilities; completing the battery backup system and storage project at the West Point Treatment Plant (16.8 megawatt system); and implementing major energy efficiency and fossil fuel reduction projects such as the South Plant heat pump project.
GHG 1.03.05	Integrate aircraft emission targets developed by the Joint Aircraft Emission Technical and Community Task Force into KCIA plans and operational decisions where KCIA has jurisdiction.	2023 → SOON	The Aircraft Emissions Task Force report includes recommended actions as part of GHG 1.2.3. The Task Force recommendations will be evaluated and incorporated into KCIA's plans and operational decisions where KCIA has jurisdiction in 2024.
		2025	KCIA has plans to incorporate the FAA EAGLE program and is advocating for phasing out leaded aviation gas. KCIA is working to secure the Aircraft Carbon Accreditation Program Level 3 certification is underway and expected by December 2025.
GHG 1.04.01	King County shall assess and publicly report on its normalized and total energy usage and total GHG emissions associated with county operations, consistent with King County Comprehensive Plan Policy E-202.	2023	Consistent with King County Comprehensive Plan Policy E-202, King County has assessed and publicly reported on its normalized and total energy usage and total GHG emissions associated with county operations in the 2023 Biennial Report.
		2025	Consistent with King County Comprehensive Plan Policy E-202, King County has assessed and will publicly report on its normalized and total energy usage and total GHG emissions associated with county operations for 2023 and 2024 in the 2020 SCAP progress update transmitted with the 2025 SCAP.
GHG 1.04.02	Establish operational GHG measurement principles. To clarify what and how King County will measure GHG emissions toward adopted operational targets,	2023	The 2020 SCAP formalized King County's operational GHG measurement principles (see Strategy A.17 in Appendix V) and clarified what and how King County measures GHG emissions toward adopted operational targets. The status update provided for Performance Measure GHG 2 (operational GHG emissions) aligns with these principles.

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	the 2020 SCAP includes new guidance on GHG measurement principles as Strategy A.17 in the Appendix V: Operational Energy and GHG Guidance.	2025	See 2023 update
GHG 1.04.03	Collaborate to set transparent standards to account for the net energy and GHG emissions impacts of government actions such as constructing transportation infrastructure and providing services such as recycling and transit and shall assess and publicly report these impacts as practicable, consistent with King County Comprehensive Plan Policy E-203.	2023	King County provides several community services and actions that reduce community GHG emissions. Examples include transit service, recycling and composting policies and programs, renewable energy production, forest and soil carbon sequestration projects, a regional trail system, and commute trip reduction programs. As appropriate, King County will continue to help set standards from how to appropriately account for the net GHG impact of these services and actions, and also to report on their net GHG impact.
		2025	See 2023 update
GHG 2.01.01	Collaborate with local elected leaders and community members to develop a decision package and regional ballot funding measure. Seek additional funding to implement METRO CONNECTS to help sustain service and capital programs. Regional funding will require approval from the King County Transportation	2023	Metro, Executive leadership, and partners recognize that implementing Metro Connects will require additional funding. Metro also must be in a position to effectively deliver system growth whenever additional funding is secured. which is why Metro's priority is improving reliability, perception of safety, and maintaining and restoring existing service.
	Benefit District and King County voter approval. Metro Transit, in partnership with local elected leaders, will continue to evaluate new sources of revenue, many of which may require approval from the Washington State Legislature and ensure support for public transportation is integrated into future climate policy revenue sources.	2025	Metro continues to communicate budget constraints to the Executive Office and Council. Metro has initiated a project to update its budget and operational assumptions to build out a snapshot of the potential customer experience with the influx of new funding dollars, in order to be responsive to King County Transportation Benefit District (TBD) member actions or requests. This communications tool, in its final form in 2026, will include a summary of anticipated and potential revenue sources. Metro will make progress towards this communications project and will be prepared to be responsive to council members as well as local elected leaders should they decide to explore new revenue. Metro staff, with proposed consultant support, will also research
GHG 2.01.02	Identify and report on the level of additional transit investments needed to achieve the SCAP regional transit ridership and and car reduction targets. Report on the gap between current Metro service levels and costs and what would be needed to achieve the SCAP goals. including potential funding sources at time of reporting, and as part of future conversations about funding for Metro Connects identify funding levels to cover the gap in Metro transit	2023	and evaluate changes to travel trends and revenue forecasts in order best serve growing ridership. Metro is coordinating with the PSRC efforts to explore the question of what transit service levels are required to achieve car trip reduction goals. Metro is supporting a PSRC analysis of the 2050 Regional Transportation Plan and follow up analysis to evaluate transit service levels required to achieve regional Vehicle Miles Traveled (VMT) reduction goals by 2030. Timing of Metro's tiered analysis is planned for 2024 to inform both the Metro Connects and 2025 SCAP updates. Additional funding will be required to complete Metro's analysis.
	service levels. Regularly update the transit service levels and cost modeling in future SCAP and updates to keep up with inflation and other changing conditions.	2025	Metro will provide 3,915,208 hours of bus service across the county in Spring 2025, an increase of over 188,000 service hours, around five percent growth since Fall 2023. Metro currently provides roughly 54 percent of the service envisioned in Metro Connects, which assumes roughly 7,250,000 total service hours in 2050. Metro would need to increase annual spending by over \$853M over the next 25 years to align with the 2050 targets.
			Metro's East Link Connections (ELC) bus network restructure will better align bus service with new Link light expansion on the eastside, increase connections between major employment centers, and improve bus service, especially for underserved populations. ELC will add about 160,000 annual service hours. About 64,000 of those hours will be added in 2025 and the remainder will be added in 2026-27, pending workforce availability.

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GHG 2.02.01	Advocate and engage in regional conversation on transit service growth and service funding to achieve county climate goals. Achieving regional VMT goals will require transit service investments, land use density, and vehicle usage pricing above and beyond what is currently proposed in METRO CONNECTS, ST3, and Vision 2050.	2023	Though delivering Metro Connects alone will not achieve regional VMT goals, making progress towards Metro Connects will help. Metro's Service Guidelines, which inform service changes, include direction for adding, changing, and reducing service, in alignment with Metro Connects. The 2021 updates aimed to prioritize addressing climate change in a few ways. For example Metro's Strategic Plan for Public Transportation (2021-2031) included a specific goal to address the climate crisis and environmental justice by reducing greenhouse gas emissions, reducing energy and fossil fuel use in facilities, and operating with the highest standards of green building and equitable development. Metro's Service Guidelines evaluate productivity of each route to analyze ridership thresholds impact on greenhouse gas emissions. Routes with low productivity become candidates for service change given impact on climate change This policy direction, in addition to the fact that Metro's policies support actions like transit-supportive land use and equitable vehicle usage pricing, will help deliver on this priority action.
		2023	Average weekday ridership increased from around 262,000 in October 2023 to more than 288,000 in October 2024. Approximately 16,000 additional transit trips occurred on the average weekday in 2024, helping Metro make progress on VMT reduction goals. Metro will continue to monitor progress on ridership as it works to implement the goals in the Strategic Plan and Metro Connects. Metro is developing a proviso response in 2025 to highlight tradeoffs between emissions reductions strategies and evaluate how increased transit service might increase ridership and reduce VMT.
GHG 2.02.02	Update Metro's policies, including Service Guidelines and METRO CONNECTS, to reflect service priorities in routes that will reduce GHG emissions, balancing ridership and climate priorities with other identified investment needs, including equity. Ensuring adherence to climate goals will require service priorities that focus on higher ridership services.	2025	King County adopted updated Metro policies in 2021. Strategies and priority actions from the 2020 SCAP were integrated and adopted as strategies, objectives, and performance measures in the updated Metro Strategic plan. Metro's updated Service Guidelines also included new guidance related to reducing vehicle emissions. For example, the guidelines outlined thresholds for routes with low productivity (rides per hour) to become candidates for changes in service type to reduce the impact on climate change. Metro Service Guidelines consider equity, land use, and geographic value to establish the priority order for future investments and service reductions.
		2025	With the support of a consultant, Metro updated ridership projections and continues to conduct travel demand modeling for various service level scenarios. Metro is also tracking revised priority actions and metrics of the 2025 SCAP update to inform pending policy updates scheduled for 2027. Metro will complete travel demand modeling associated with different service level scenarios in effort to inform policy updates in 2027 to align to the 2025 SCAP.
GHG 2.02.03	Advocate and engage in regional conversation to evaluate and implement options for equitable options for vehicle usage pricing and management policies. Activities include expansion of Metro Transit's park-and-ride pricing program, development of King County position on pricing tools, and identification of near-term opportunities to build incentives for pricing into transit planning and policy agreements.	2023	King County supported road usage charge bills considered by the Washington Legislature in the 2023 session, supporting the transition from a gas tax to a road usage charge and supporting amendments that would broaden the usage of the funding to support transit and other multimodal improvements. Metro provided input on state and regional processes including the Washington State Department of Transportation (WSDOT) analysis of VMT and the PSRC analysis exploring usage charging. Metro conducted an evaluation of options for equitable implementation of vehicle usage pricing in examples implemented internationally and in the U.S. Next steps are to develop coordinated policy priorities in coordination with partners.
		2023	King County supported road usage charge bills considered by the Washington Legislature in the 2025 session, supporting the transition from a gas tax to a road usage charge and supporting amendments that would broaden the usage of the funding to support transit and other multimodal improvements. The PSRC will develop a draft Regional Transportation Plan which will likely assume implementation of a road usage charge to support both roadway and public transportation investments.

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GHG 2.03.01	Increase communication about Metro's services to ensure that residents from all communities know about these services and how to use them. This includes innovative mobility services that connect to Metro's services and fare products, such as ORCA LIFT, Metro's income-based fare program. Launch at least one Transportation Demand Management (TDM) campaign per year.	2023	Metro involves communities early to understand how best to reach focus audiences when planning campaigns to raise awareness about service changes and mobility options countywide. Metro has developed General Tranisit Feed Specification (GTFS)-flex feeds that will allow trip planners to show flexible services like MetroFlex and Access paratransit. Metro partnered with Seattle Department of Transportation (SDOT), Sound Transit, and local micromobility providers to launch and market new pilot programs to reward digital transit ticket customers for increasing transit use, and to incentivize connections to transit via bike-share and scootershare. The Metro TDM Team has led multiple campaigns to meet and exceed this SCAP action goal. The TDM Team has partnered with the Service Planning and Community Engagement Teams to understand community education needs during the service planning phase and has led campaigns related to transit system expansion and major service changes, including opening of Link Line 1/Northgate Link, county-wide promotion of small business incentives for ORCA products in, a campaign to raise awareness about mobility options to travel to Northgate Station with upcoming development of Transit-Oriented Development (TOD) and a regional campaign to promote Free Youth Transit Pass. Future campaigns are also in development, including a second regional campaign to promote Free Youth Transit Pass. Future campaigns are also in development, including a second regional campaign to promote Free Youth Transit Pass, campaigns related to the East Link Starter Line opening in early 2024, Lynnwood Link opening in late 2024 and the full East Link opening in 2025, which will all be opportunities to promote mobility options, ORCA fare programs for eligible populations and reach existing and potential riders to encourage them to reduce single occupancy vehicle trips and choose more sustainable and affordable modes of transportation. Metro TDM campaigns are primarily grant funded and resources are available to continue t
GHG 2.03.02	Change Metro's adopted policies to assert the role of innovation, address new mobility services, and support innovative, integrated, equitable, sustainable mobility.	2023	focused on marketing and incentive campaigns for the Downtown Redmond light rail extension and piloting a new ORCA pass incentive. In 2021 Metro updated its Strategic Plan to include the role of innovation. The two primary objectives are focused on Metro and partners adopting innovative services that support transit and ensuring such services follow fair labor practices and accountability measures and serve priority populations. Metro Strategic Plan updated agency's vision to deliver a regional, innovative, and integrated mobility network that is safe, equitable, and sustainable.
		2025	See 2023 update.
GHG 2.03.03	Investigate how strategies such as telework or other evolutions in the workplace could help decrease overall VMT, using lessons learned from the COVID - 19 pandemic.	2023	Metro partnered with the University of Washington Mobility Innovation Center to carry out scenario analysis of the ongoing interplay of telework and commute patterns on ridership and VMT. This analysis has supported broader evaluation of ridership projections as travel patterns shift following COVID pandemic disruptions.
		2025	See 2023 update.
GHG 2.04.01	Develop station area passenger facilities and guidelines that prioritize passenger access and deprioritize single-occupancy vehicle access at Metro and partner agency transit stops and stations.	2023	Metro is partnering with Sound Transit to support and implement transit facilities and service restructures in coordination with planned Sound Transit expansion projects. Metro is working on a mobility hub typology analysis and implementation planning, both of which will be informed by community engagement. The mobility hubs program has staffing and budget capacity for planning only, implementation will require additional support.

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		2025	Metro continues to partner with Sound Transit on the development of passenger facilities and off-street layover that prioritize passenger access and deprioritize single occupancy vehicle access at Metro and partner agency transit stops and stations. Metro's ST Integration Team has staffing and budget capacity for planning only, implementation will require additional support from both capital delivery and faces budgetary constraints. Sound Transit's Stride S1 Renton Transit Center project achieved 100 percent design in Q4 2024 and construction is expected to begin in 2025; this project will provide six new active bays, 13 layover spaces, and operator support facilities. Metro is finalizing passenger facility guidelines at Link Stations, which will establish bus stop typologies at existing and future ST transfer points to Metro service.
GHG 2.04.02	Enhance opportunities to walk, roll, and bike safely and conveniently to transit by providing secure bike parking at transit locations and partnering with jurisdictions to design and construct pedestrian and bike connections.	2023	From 2020 through 2023, Metro enhanced opportunities to access transit, including Safe Routes to Transit (SR2T) program, and entered into design and/or construction agreements with cities and WSDOT to contribute to pedestrian, bike and ADA improvements in 11 communities at nearly 40 locations. Secure bike parking was upgraded at seven Park & Rides and Transit Centers, adding on-demand BikeLink lockers. Metro has grant funding and local match to advance this work for transit improvements. Access improvements along the future RapidRide I-line are also in design. Equipping partners with the staffing and budget resources to provide transit access improvements is an ongoing barrier.
		2025	Metro partnered with the Mobility Hub Board, community members that represent underserved populations across King County, to develop a Mobility Hub Implementation Guide. Metro initiated the SR2T Implementation Guide to proactively identify and prioritize access investments, including ongoing coordination with bus stop improvements team to implement holistic investments, such as installation of an enhanced crossing to a new bus stop at Green River College in Auburn. Metro conducted a Park and Ride System Evaluation to right size Metro's transit customer parking investments. In 2025, Metro will coordinate with Sound Transit to implement regional paid parking at transit facilities, and upgrade/phase-out leased bike lockers to on-demand BikeLink lockers at key transit hubs.
GHG 2.05.01	Provide a range of transit and mobility services that allow for seamless connections between modes and destinations, including on-demand, flexible services that leverage mobility-as-a-service.	2023	 Metro provides a range of mobility services that allow for seamless connections (i.e, bus and water taxi). Additionally, Metro staff have launched a range of innovative mobility services, including: Designed and implemented policies and methodologies for prioritizing on-demand flexible service across the county. Initiated an integrated service planning effort to streamline and improve Metro's suite of flexible services. Applied lessons learned from years of various on-demand flexible service pilots to consolidate services and launch Metro Flex. Completed initial planning for an on-demand pilot for Access Paratransit customers Launched the Transit Go Rewards pilot, incentivizing transit ridership with rewards points that can be redeemed for either transit tickets or bike and scooter share services. Partnered with SDOT, Sound Transit, and others to launch Bike and Scoot to Transit pilot, incentivizing bikeshare and scooter share connections to transit. Partnered with Climate Pledge Arena and others to distribute transit passes to sports and event attendees. Metro launched a Universal Basic Mobility program, conferring a stipend via prepaid debit cards to participants in the Department
		2023	of Community and Health Services (DCHS)'s Health Through Housing program, to be spent on eligible mobility expenses. Metro launched Access On-Demand pilot for paratransit customers. Metro began work on a roadmap for a seven-year coordinated effort to integrate Metro's flexible services into a more seamless, easy-to-access system. Metro began testing efforts to integrate services with Transportation Network Companies in select program areas, including the Access On Demand pilot, Access, Home Free Guarantee, and Taxi Scrip. In 2025, Metro will evaluate and expand the Universal Basic Mobility and Access On-Demand pilots, and enhance the Transit Go Rewards program.

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GHG 2.05.02	Develop corridor prioritization to invest in speed and reliability improvements in areas with greatest needs. Partner with local jurisdictions to develop plans for transit corridors that provide safe and reliable transit services. Complete a minimum of 20 spot improvements and assess needs for 2-3 corridor each biennium.	2023	In the 2021-22 biennium, 38 spot improvements, capital improvements such as traffic signalization that improve speed and reliability for transit, were completed; planning studies were completed on the Route 165 and 181 corridors and are now in preliminary design. An updated corridor prioritization was completed in 2022 to inform where the greatest need and opportunities are for corridor speed and reliability improvements. As a result of that corridor prioritization effort, two corridors (Route 5 and 36) are undergoing planning studies for future improvements in 2023 and both have been awarded grant funding for construction.
		2025	Metro completed 16 spot improvements in 2023 and 21 spot improvements in 2024. In 2025, 15-20 spot improvements are expected to be completed. Corridor planning studies were completed for Route 5 and 36. Corridor improvement projects were substantially completed for Route 44 and 48 in partnership with SDOT. In 2025, planning studies for Route 60 and 106 are underway. Substantial construction of Route 40 corridor improvement is expected by the end of 2025, in partnership with SDOT.
GHG 2.05.03	Provide sustained and increased transit frequency, as funding allows, to make it more convenient for people to use transit get out of their cars.	2023	Investments in high frequency and high capacity transit service with associated land use change offers the greatest potential for emission reductions from Metro investments. RapidRide H Line was completed in spring 2023. Lines G, I, and J are in design or under construction. Lines R and K are restarting planning after being paused during the pandemic.
		2025	Investments in high frequency and high-capacity transit service with associated land use change offers the greatest potential for emission reductions from Metro investments. RapidRide G Line service launched in September 2024. RapidRide J Line began construction phase in October 2024. RapidRide K Line and R Line completed 10 percent Design in Q1 2025. RapidRide I Line will begin construction phase in summer of 2025. RapidRide K Line will begin preliminary engineering phase in fall of 2025. RapidRide R Line will determine in the fall of 2025 the jurisdictional partnership agreement for project delivery.
GHG 2.06.01	Update King County Countywide Planning Policies that result in local jurisdictions taking transit supportive actions, including prioritizing right-of-way for transit, increased zoning capacity, reducing parking requirements, increasing affordable housing, and minimizing displacement near transit.	2023	The King County Countywide Planning Policies were updated to support local jurisdictions taking transit supportive actions by the Growth Management Planning Council in 2021, and ratified by King County jurisdictions in 2022, to support jurisdictions' comprehensive plan updates due in Dec. 2024.
		2025	See 2023 update
GHG 2.06.02	Update King County Centers Framework to focus growth in countywide designated centers that are zoned for transit-supported densities.	2023	As a part of the update to the King County Countywide Planning Policies, the centers framework was updated in 2021, and ratified by King County jurisdictions in 2022. The Growth Management Planning Council (GMPC) approved a list of candidate countywide centers in late 2021. Thresholds for qualifying as a countywide center are based on transit supportive densities. In 2025, GMPC is anticipated to fully designate countywide centers, implementing the new framework.
		2025	See 2023 update
GHG 2.07.01	Update Metro's Service Guidelines to emphasize the role of land use in supporting transit use and in how Metro sets service levels. A new land use section will be added to describe the land uses (densities, the mix of uses, urban form) that are supportive of each service level. Corridor household and job density factors are then used to set service levels and can provide guidance	2023	Metro's Service Guidelines were updated and adopted by the King County Council in 2021. The updated guidelines include a section on how land use relates to Metro service types. This information was also used by Metro to develop guidance materials for partner jurisdictions in spring 2023, such as a checklist for when jurisdictions develop their comprehensive plans.
	for cities updating their comprehensive plans and zoning codes.	2025	See 2023 update

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GHG 2.07.02	Develop and implement both a countywide and a Metro-specific Equitable Transit-Oriented Communities policy and implementation plan, and related processes to support a strategic and robust ETOC program. Incorporate land use and ETOD considerations in alignment and planning for highfrequency transit routes. Conduct pre-development and planning work to support Kenmore and Burien ETOD projects.	2023	The Metro Transit Equitable TOD and Transit Oriented Communities Policy was adopted and funding is available to support limited planning for TOD outcomes at Kenmore and Burien as well as a TOD study for the upcoming RapidRide K line. Full scale implementation to develop and deliver on the opportunities for King County to maximize transit-oriented projects and outcomes is constrained by limited funding currently available to support growing the staffing capacity and technical consultant support.
		2025	In 2024, Metro supported the construction of the Northgate Affordable Housing project, a 235-unit mixed-use affordable housing project, serving households earning 60 percent of the area median income or below. Metro also worked with the Prosecuting Attorney's Office and the developers to amend the transaction to help bring needed resources to the commercial side of the project.
			Metro's TOD program continues to support the K-line RapidRide project in developing a TOD study to inform the station selection and identify development opportunities in the corridor. Metro is developing the RFP for development at the Burien Transit Center for release in early 2025. Metro's TOC program has many other projects identified that could advance if additional resources were available. The full scope of the program, advancing projects on Metro's properties, supporting corridor projects, planning strategically with Metro's real estate and identifying and coordinating funding for affordable housing with DCHS is not possible without additional resources. Staffed and funded at current levels, Metro's program lacks momentum to reach needed County goals.
GHG 2.08.01	Plan and fund programs that connect communities to one another and to other areas of open space, such as parks and farms. Focus on extending existing regional trails and developing major new routes, especially in historically underserved areas and communities with poor health indicators relative to the County population. Development over this period will include the design and construction of projects such as the Lake to Sound Trail through five south county cities, East Lake Sammamish Trail, Green-to-Cedar Rivers and Foothills trails in southeast King County, extension of the Green River Trail in Tukwila and south Seattle, and the Eastside Rail Corridor Trail (Eastrail) through Eastside cities. Also, support redevelopment and major maintenance of trails, bridges, and other trail facilities will be ongoing. All these projects have significant multi-jurisdictional support and participation.	2023	Design and construction of of the Lake to Sound Trail through five south county cities, East Lake Sammamish Trail, Green-to-Cedar Rivers and Foothills trails in southeast King County, extension of the Green River Trail in Tukwila and south Seattle, and the Eastside Rail Corridor Trail (Eastrail) through Eastside cities are on track, with some barriers. King County Parks Division has several segments of identified projects opening between summer of 2023 and the end of 2025, while other segments are in final design or planning phases and are still projected several years out.
		2025	Since October 2023, the following trails were completed and opened: East Lake Sammamish Trail; Foothills Trail segment and White River bridge in Enumclaw; Eastrail crossing of NE 8 th St in Bellevue; and Lake to Sound segment C in SeaTac. Construction has begun on Wilburton Trestle portion of Eastrail. By December 2025, the Marymoor Gateway Trail connecting Marymoor Park to the new light rail station in Redmond will be complete. The Lake to Sound segment C in Burien will be open. Construction will begin on Green to Cedar south extension.
GHG 2.08.02	Implement the Land Conservation Initiative (LCI) efforts to address open space inequities. The LCI includes urban green space as a key conservation target, prioritizing areas with limited park access. Areas of greatest need include those with higher health disparities; people living with low incomes; Black, Indigenous, people of color (BIPOC) communities; and people living more than a 10-minute walk from a park.	2023	Construction on the Wilburton Trestle will continue. DNRP is implementing the LCI with a match-waiver option for Opportunity Areas, areas identified as serving communities who are experieincing hardships related to lack of open space access. King County, city, and Non-Governmental Organization (NGO) applicants can apply for a waiver when seeking Conservation Futures grants by automatically qualifying or providing qualitative evidence. King County is on track to achieve goals for the LCI.
		2025	Starting in 2023, additional funds from the 2022 Conservation Futures, paired with across-the-board match reduction, brought a five-fold increase in LCI acquisition funding as compared with 2020. King County is ahead of schedule in fee acquisitors compared with modeled projections. This year, DNRP will bring additional attention to easement acquisitions for working forests and continue to refine the need for open space in the context of recreation access.
GHG 2.09.01	Protect federal vehicle efficiency standards.	2023	King County has been engaged in efforts to protect federal vehicle efficiency standards. Efforts include King County led drafting of a joint comment letter on a former federal administration proposal to freeze vehicle efficiency standards. The letter was signed on to by elected officials from cities, counties, ports, and Tribes. Key concerns of the proposal were the impact of this proposal on health, air quality, markets for fuel efficient vehicles, and the ability to meet climate goals. The current federal administration has advanced stronger fuel efficiency standards in recent years.

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		2025	The new federal administration is expected to repeal fuel efficiency and vehicle emissions standards. The USDOT Secretary has called for lowering the federal Corporate Average Fuel Economy (CAFE) standards. Ongoing efforts to defend federal CAFE standards will be necessary to ensure progress reducing emissions from vehicles.
GHG 2.09.02	Support the adoption of a statewide or regional low carbon fuel standard that gradually lowers pollution from transportation fuels. Additionally, support funding and policies that advance other clean fuel and zero-emission vehicle strategies.	2023	Washington Clean Fuel Standard was adopted in 2021 and went into effect in Jan 2023. King County was actively involved in advocacy for the bill during the 2021 legislative session, including partner coordination and providing supportive testimony. From 2/21/2022, King County was actively involved in the rulemaking process: submitting several comment letters in coordination with partners to advocate for more stringent reduction targets, pro-equity implementation, and ensuring program requirements facilitated local government fleet owners participation as a credit generator.
		2025	With Washington's Clean Fuel Standard now active, King County is participating in the program. As an owner of electric vehicles (EV) and EV chargers, the County is eligible to generate credits and is working to establish an agreement with a third-party aggregator to sell credits to fuel producers. King County continues to convene partners to support efforts to strengthen statewide Clean Fuel Standard and Motor Vehicle Emissions Standards. Including adoption of Advance Clean Cars II and support for future WA state adoption of Advanced Clean Fleets.
GHG 2.10.01	Evaluate opportunities to expand publicly accessible EV charging infrastructure at King County facilities that prioritizes equitable access to shared mobility.	2023	In 2021, Metro completed a feasibility assessment of publicly accessible charging at Metro-operated park & ride facilities and opportunities for expansion. DNRP also identified (Nov. 2020) a list of candidate site locations for publicly accessible charging at King County Parks facilities. King County is partnering with the UW Mobility Innovation Center to explore design options for electrification at shared use mobility hubs. The King County Executive Climate Office (ECO) is coordinating grant applications to pursue funding to support publicly accessible charging at King County facilities, including WA Dept. of Commerce grant due 12/1/2023. DES is managing an enterprise-focused Electric Vehicle Charging Infrastructure (EVCI) feasibility study that is developing a mapping tool to identify fleet and public charging gaps and help prioritize build-out and deployment; this tool will include equity and health disparity layers to better inform prioritization.
		2025	Since Oct 2023, the County has been awarded \$7.9M by the WA Dept. for Commerce for up to 50 public fast charging ports, and over 300 Level 2 ports at fleet and multi-family residential locations. The first installations are currently underway and are expected to continue through Dec. 2026. The County is also partnering with PSE to identify potential locations for PSE-owned public chargers at selected trailheads, recreational facilities, and other underserved County-owned locations. By Dec. 2025, Department of Executive Services (DES) expects to complete a study of the charging needs at its top 20 largest Fleet garaging facilities, some of which may share chargers with the public at certain times of day. Initial installations are expected to begin in late 2025.
GHG 2.10.02	Engage in regional coordination efforts with King County Climate and Equity Community Taskforce and existing forums, including the Regional Transportation Electrification Workgroup, to accelerate equitable distribution of benefits of EVs, so communities that have experienced a disproportionate burden from air pollution see reductions first and promoting equitable access to mobility that prioritizes shared mobility solutions.	2023	King County is coordinating with Seattle City Light, PSRC, and the PSCAA to focus on County fleet electrification. Metro has a representative that was selected to participate on the EV Council Advisory Committee to develop the WA State Transportation Electrification Plan. With the new hire of an EV Planner in the King County Climate Office, there is additional capacity and a point person to coordinate work on expanding equitable access to EV benefits. In 2024-25, this work will be coordinate with the King County Climate and Equity Community Taskforce.
		2025	ECO is collaborating on scoping of a multi-county regional roadmap for EV charger deployment in partnership with PSRC and the PSCAA. By the end of 2025, partners have a goal to have an RFP drafted soliciting consultant support in designing and researching an EV roadmap, which will focus on underserved areas and EV charging deserts.

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GHG 2.10.03	Support engagement and partnerships with utilities and organizations to develop regional pilots to incent the transition to EV ownership for all sectors, through development of infrastructure, education, and grants and incentives.	2023	Examples of partnership with utilities include: Metro partnered with PSE to pilot all-electric Community Van service in Algona and Pacific; Metro also partnered with PSE to install chargers at its Bellevue Base to support electric non-revenue vehicles; Metro and FMD are submitting grants for utility support for EV charger installation and equipment; ongoing collaboration to assess feasibility and power supply for new charging infrastructure at Metro bus base facilities; ECO coordination with utilities and co-applicants on joint EV charger funding applications in partnership with cities, affordable housing providers, charging companies, and CoOp-style, non-profit shared EV programs. There has also been engagement with Seattle City Light and Pacific Northwest National Labs (PNNL) on a WA Commerce Grant application to re-rate MetroEV batteries for second-life use as Battery Energy System Storage (BESS).
		2025	The County is partnering with PSE and Seattle City Light to apply for fleet charger rebates at various County facilities. A current partnership with PSE is identifying potential locations for PSE-owned public chargers at selected trailheads, recreational facilities, and other underserved County-owned locations. Community outreach will be underway by Dec. 2025. The Climate Office has endorsed several applications by ZEV CoOp for state EV and EV charging grants. Per the 2023 update, PNNL did not have funding to continue participation in the potential EV/BESS project with Metro. That, along with other challenges, made the project not viable and was not further pursued by Metro.
GHG 2.10.04	Evaluate and consider adoption of incentives or requirements for Transportation Network Companies licensing that phases in EV adoption.	2023 SOON	State preemption has limited local authority on this action. As of Jan. 1, 2022 the County does not have authority to change regulations for Transportation Network Companies. Uber and Lyft have each set a goal to have 100 percent EV use in the U.S. by 2030. Focus has shifted to exploring how King County can support grant funding for EV charging that facilitates drivers charging vehicles more conveniently.
		2025	See 2023 update.
GHG 2.10.05	Develop code revisions for unincorporated King County that incentivizes EV readiness in new development.	2023	Ordinance 19316 was adopted in 2021 that required EV readiness in new development for new buildings and redevelopment, exempting single-family homes.
		2025	See 2023 update.
GHG 2.11.01	 Develop standard tools and resources to guide purchasing decisions. Analyze and compare lease and purchase options for light-duty EVs. (DES, Metro) Establish and update incremental cost guidance for when to purchase EVs for medium- and heavy-duty applications. (DES, Metro, Executive Office) 	2023	Fleets across King County are making strides in establishing procedures and guidelines for purchasing EVs. Fleet Services has established a Fleet Purchasing Team, who perform market research and keep a data repository to identify available EV options. Fleet Services has developed a total cost of ownership tool to evaluate cost and inform purchasing decisions and cost projections. Fleet Services has initiated a right-size fleet analysis and has developed procurement paths to enable purchasing EVs even as supply chain issues have made purchasing difficult. Metro tracks available EV options and procures EV alternatives whenever EVs are a feasible and available option. Metro is moving toward developing more formalized guidelines and a long-range non-revenue vehicle (NRV) fleet plan.
		2025	King County has adopted an Executive Order requiring fleet managers to purchase of electric light-duty vehicles. If barriers prevent purchase of an EV, fleet managers must follow guidance to get an EV waiver form approved by the Executive Climate Office Director. DES-Fleet Asset Purchasing team works with customers in divisions to determine what EVs best meet their operational needs. DES-Fleet EV purchasing guidelines, recommendations, and rightsizing are integral to the work with customers. Metro has not yet developed formalized guidelines to support right-sizing and light-duty fleet purchasing, this work is continuing as a 2025 SCAP priority action. In 2025, Metro will begin work to develop a long-range non-revenue vehicle zero-emission fleet plan that addresses procurement and associated fueling infrastructure. DES-Fleet research will be used to finetune the EV purchasing guidelines and begin to develop EV vehicle standards. The new EV purchasing waiver was deployed in 2025 to DES and Metro.

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GHG 2.12.01	 Electrify King County's vehicle fleet and build out charging infrastructure: Upgrade existing EVchargers and expand to facilities where EV charging infrastructure is needed. (DES, Metro) Develop a phased EV charging infrastructure plan for County facilities by 2021. (DES, Metro) Focus on the transition of light-duty sedans to zero emission, including prioritizing the installation of EV supply equipment (EVSE) at County facilities. (DES, Metro) Continue transition to a zero-emission bus fleet and install chargers at the South Base Campus to support operations in south King County. (Metro) Pilot an electric Class 8 (80,000 gross vehicle weight) truck including infrastructure by 2025. (SWD) Seek partnerships with other governments and utility providers to expand and leverage EV charging. (DES, Metro) 	2023	 Several efforts are underway to electrify King County's vehicle fleet including: King County is conducting an enterprise-wide study of EVSE needs across the County's facilities, led by DES – FMD. This study will inform an overall strategy and next steps for installing charging infrastructure for County fleets. Fleet Services is developing the EV transition plan for the County's fleet (non-Metro) in Collaboration with agencies to develop agency specific plans where appropriate. Fleet Services has also purchased EVs as opportunities arise, as of October 2023 there are 41 EVs in the light-duty fleet. The SWD has one of the few Class 8 trucks in the country and is working with manufacturer for better product design. Since taking delivery in 2022, this vehicle has had several maintenance issues and has not operated as expected. KCIA ordered an electric street sweeper for the runway, which is anticipated to be delivered by the end of November 2023. Metro has 48 LEAFs and 1 Ford Mach-E in its NRV support fleet (as of October 2023) with additional EVs on order including Ford Lightnings, E-Transit Box Trucks, and additional Mach-Es. Metro has an EV infrastructure installation program and has installed a first round of infrastructure to support its support vehicles at a number of its facilities. Metro is conducting a telematics study of its support fleet operating from three of its facilities. Metro is conducting a telematics study of its support fleet charging installations will require electrical facility upgrades. The EV transition plan for Contracted Services, including Rideshare and Access Paratransit is under development. Metro is working on an Access EV Pilot that is anticipated to kick off in 2024. There are currently challenges to getting an acceptable EV A

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		2025	Metro added 120 EVs to the vanpool fleet in 2024, with two new Level 2 chargers installed at the Van Distribution Center, for a total of five Level 2 chargers. The new seven-passenger EVs will join nearly two dozen electric compact vanpool cars already on the road, increasing the share of EVs in Metro's vanpool fleet to almost 10 percent. In 2024, Metro added five Level 2 chargers with nine ports at Metro's South Base and six dual port Level 2 chargers with 12 ports at Metro's East Base to support its non-revenue electric vehicles. In 2024, Metro put 37 EVs in service in its non-revenue fleet, to bring its total active EVs up to 85 (14 percent of NRV fleet). In 2024, Metro signed a contract with GILLIG to procure up to 395 Battery Electric Buses (BEBs). Metro also signed a contract with Solaris, a Poland-based bus manufacture, to purchase up to 16 zero-emission buses. The first 89 GILLIG BEBs will arrive starting in August 2025 and chargers will be installed at Tukwila Base. SWD has a Class 8 semi-truck in its Fleet and will be leasing a second Class 8 truck to be delivered in May for beta testing with/for Kenworth. DES-Fleet contracted with DKS consultants to develop vehicle electrification plans for key customers. Fleet will finalize vehicle electrification transition plans specific to each agency that indicate the types of EVs suitable for their needs. DES-Fleet led an EV take-home vehicle pilot for the Department of Public Health (DPH) in October 2023, involving six participants. The pilot concluded in December 2024, demonstrating positive outcomes, including saving the county over \$2,800 in fuel costs and a reduction of 6,759 kgs in CO2 emissions. Building on the success of the DPH pilot, Fleet launched a similar year-long home charging pilot with the King County Sheriff's Office (KCSO) in January 2025.
GHG 2.12.02	 Expand the use of alternative fuels when EVs are not feasible. Explore options to use renewable diesel and gasoline or other biofuels. (Metro, DES, SWD) Explore options for expanding the use of alternative fuels, such as propane, in smaller fleets, such as Access paratransit. (Metro, DES) 	2023	With the adoption of the Washington Clean Fuel Standard, the incremental price for alternative fuels and the accountability standards for emissions reductions of biofuels make expanding use of alternative fuels more favorable. Fleet Services is exploring a transition to renewable diesel, evaluating some locations in 2024. Metro and SWD are interested in evaluating feasibility of expanding renewable diesel. Metro is exploring renewable propane options for Access paratransit vehicles.
		2025	Metro piloted the use of renewable diesel at East Base in late 2024 to assess performance in all weather conditions. Performance and costs associated with the use of renewable diesel at Metro's East Base will be assessed in 2025 for potential expansion to other base locations. Approximately 25 percent of Metro's Access paratransit fleet is currently using renewable propane. SWD has converted its diesel fuel use to R99 renewable diesel. Fleet Services received its first deliveries of R99 in September 2024 at the Renton and Black Diamond facilities. A month later, one more facility, Fall City, was added to the locations receiving R99. Fleet purchased a total of 58,713 gallons of RD in 2024. Fleet Services will continue to purchase R99 at our three internal fuel sites in 2025.
GHG 2.13.01	Optimize use of County fleet vehicles and equipment using automatic vehicle location (AVL) technology. Complete AVL system installations and train all agencies to use the AVL system by end of 2021.	2023	Fleet Services Division has completed automated vehicle location (AVL) installations for all vehicles that can accommodate the technology. Fleet Services is using AVL data to provide customers with monthly reports and inform discussion on vehicle replacement and right sizing. Metro has completed nearly all AVL vehicle installations, with some troubleshooting required. Metro is using consultant support to analyze AVL data to inform charging infrastructure and vehicle requirements. Additional resources for more robust analysis of AVL data would further inform fleet and infrastructure planning and purchasing.
		2025	Metro includes AVL installation as part of all new non-revenue vehicle preparation. Metro reviews AVL data in considering replacement vehicles (as part of an EV replacement feasibility analysis for applicable vehicles). In Q1 Fleet is using AVL utilization data to inform vehicle replacements, to begin pooling discussions with agencies, and to evaluate EV placement.

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GHG 2.13.02	Evaluate operational business needs to ensure the appropriate vehicle is purchased (or not purchased) for the job.	2023	Fleet Services Division meets regularly with customers to review utilization data and targets to inform right sizing vehicles. Recent efforts include reducing fleet size where there is opportunity to right size and, in 2024, to roll out a new vehicle reservation technology which will improve ability to pool vehicles and enhance utilization. Metro considers the appropriate sizing of vehicles but does not have a formalized approach for right sizing vehicles.
		2025	Metro considers the appropriate sizing of vehicles in vehicle replacement planning, a formal process for right-sizing vehicles is still in progress. Metro has been able to substitute EVs with appropriate passenger capacity for numerous vehicle replacements. Fleet Services worked with three agencies to reduce a limited number of under-utilized vehicles in 2023-2024. AVL system data is being used to review under-utilized vehicles and make recommendations for agency specific pools or transition to Motor Pool vehicles. Light Duty Vehicle standards are in development with the EV transition. Ensuring the right vehicle is purchased for the job is part of the standard work for the Fleet team.
GHG 2.13.03	Optimize zero-emission trolley bus fleet. Explore efficiencies, enhancements, and expansion opportunities for Metro's electric trolley bus system. Metro has set targets for increasing utilization of the electric trolleys on weekends, with an initial target of 10 percent utilization on weekends in December 2020, and a goal of increasing utilization to 90 percent over the next five years. Metro is also preparing a Trolley Expansion Master Plan to identify and prioritize opportunities to expand and optimize the trolley system.	2023	Metro is optimizing its trolley network and increasing weekend utilization. Metro recently completed its Trolley Expansion Strategic Plan to identify strategic investments to expand and is planning a study of additional opportunities to optimize and increase use of the trolley system. Funded trolley expansion projects include a project to convert Route 48 to a trolley route and a project to add trolley wire to E Pine St to facilitate a restructure of Route 12. Metro has implemented approximately 10 blackout weekends where construction that interferes with trolley operations is not permitted. Metro is also planning for replacement of the trolley batteries (Energy Storage Systems - ESS) which is anticipated to improve trolley short-distance off wire capabilities to bypass construction. Four new ESS units will be tested in late 2023/early 2024, and new ESS units for the 170 remaining vehicles in the trolley fleet will be ordered and installed after testing is complete.
		2025	Metro kicked off a planning study to recommend trolley system innovations to increase utilization. In 2025, Metro will complete the Trolley Optimization Planning study with scoped and prioritized improvements and a recommended implementation plan. By 2025, new ESS batteries should be installed to increase off wire operation capability.
GHG 2.13.04	Develop agency-specific GHG reduction action plans for the top five consuming agencies by 2022. The plans shall include strategies to reduce non-working idling.	2023	Fleet GHG reduction plans focused on electrification are completed for Metro Bus Fleet, DNRP (SWD and WTD). Plans are underway for DES and Metro Rideshare and Access fleets. Metro's Access Transportation program's contractor has adopted a no-idle policy and uses vehicle telematics to identify idling activity that does not comply with the policy. When excessive idling activity is identified, contractor employees are counseled.
		2025	Metro is participating in an enterprise-wide study on both Fleet Electrification analysis and Electric Vehicle Charging Infrastructure. These efforts will help inform next steps for non-revenue fleet electrification.
			Metro purchased 120 EVs for Metro's vanpool program to reduce GHG emissions. In 2025, Metro will begin work to develop a long-range non-revenue vehicle zero-emission fleet plan that addresses procurement and associated fueling infrastructure. Metro will also continue using renewable propane for approximately 25 percent of Access vehicles and put new EVs into service for Metro's vanpool program.
			Fleet purchased three EVs (Ford F150 Lightning, Ford Mustang Mach-E and Chevy Bolt), as demonstration vehicles. They are made available to County employees with assigned vehicles to test out for one day to up to a week. Test driving the vehicles are important part of helping Fleet gather information to understand agency needs and provides opportunities for employees to try out the EV experience. Fleet has started a second Take Home EV Pilot in KCSO. The initial phase will be winding up by the end of 2025.
			Fleet will continue the EV Demo program to gather information about the most suitable EVs for each agency and demystify EV technology for operators. Fleet Services in collaboration with our customers and support from outside consultant will complete a strategic and comprehensive EV transition plan for each of King County's agencies by summer of 2025.

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GHG 2.14.01	Teleworking. Develop new guidance to expand operational teleworking by King County's workforce, using lessons learned by emergency teleworking that occurred in response to the COVID-19 pandemic.	2023	King County developed and released a new Telecommuting policy in Dec 2020.
		2025	See 2023 update
GHG 2.14.02	Evaluate the GHG emissions associated with employee travel. Expand data collection and reporting of indirect employee travel. To date, King County has been reporting on transportation-related GHG emissions and developing GHG reduction goals based on the emissions from County-owned vehicles and equipment. Once the County understands the scope of these sources, it can set goals to reduce emissions.	2023	King County has new capacity to collect employee travel data from the new travel system called Concur. Travel data is available through the Concur travel platform for airline miles traveled and GHG's associated with it for the years 2021/22, as well as car rental data and overnight personal vehicle miles. The system does not allow for collecting data for airfare booked outside of Concur nor VMT in personal vehicles.
		2025	Employee travel has increased every year since reporting started in 2021 with the new travel system. For airfare booked through this system, the GHG emissions are calculated based on miles traveled. In 2024, employees traveled over five million miles (two thousand MTCO2e.) The system can also capture data for car rentals and overnight personal vehicle miles, but no GHG data is available for those at this time. Data is also available outside the system for travel booked and daily personal VMT, but it's not feasible to calculate GHG's at this time.
GHG 3.01.01	Support energy loan programs. • Study and develop analysis of gaps in financial offerings by economic status or geography. (Climate Action Team) • Seek to develop financing mechanisms/products with partners that fill gaps in loan and incentive offerings for both residential and commercial businesses. Stakeholders will include financing institutions and people living with low incomes and underserved communities, with others to be determined later. (Climate Action Team) • Propose a Commercial Property Assessed Clean Energy program that enables commercial and multi-family property owners to finance efficiency, renewable and resiliency improvements to their facilities. (Executive Office)	2023	Established through Ordinance 19360 (and amended via Ordinance 19449), King County has developed and launched a Commercial Property Assessed Clean Energy and Resiliency (CPACER) program that enables commercial and multi-family property owners to finance efficiency, renewable energy and resiliency improvements to their facilities. Through mid-2023, six projects funding \$80M of energy and water improvements have used the program. ECO has also partnered with local governments and local lenders to raise awareness of the EPA's \$14 billion National Clean Investment Fund (NCIF) and \$6 billion Clean Communities Investment Accelerator (CCIA). The NCIF will fund national nonprofit clean energy financing institutions to support "affordable financing for tens of thousands of clean technology projects across the country." And the CCIA will deliver funding and technical assistance to hundreds of local lenders to help deploy capital in low-income and disadvantaged communities to pursue clean energy projects.
		2025	ECO was awarded \$50 million U.S. EPA grant to support building decarbonization work across the Puget Sound. As part of that programming, ECO hired a regional clean energy financing lead to support development of financing mechanisms and products with partners that fill gaps in loan and incentive offerings for both residential and commercial businesses. This work will include supporting CPACER program development to increase use of the program among building owners and small, local lenders. Through mid-2025, the CPACER program has been used by 10 projects supporting lending for \$165 million worth of energy and water improvements.
GHG 3.01.02	Support state level action to require disclosure and performance improvement for commercial buildings per the Clean Buildings Act (HB 1257, 2019).	2023	King County has supported the adoption and expansion of the WA Clean Buildings Act.

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		2025	King County supported the adoption and expansion of the WA Clean Buildings Act. Most recently, in the 2025 legislative session, King County has been monitoring and supporting HB 1543, which seeks to improve compliance pathways for the clean buildings performance standard in Washington by introducing alternative metrics and extending reporting timelines.
GHG 3.02.01	Develop coordinated, countywide program to provide targeted service delivery for residential efficiency. Prioritize low income, renters, seniors, and affordable housing units. • An in-depth conservation assessment may prioritize specific sectors for	2023	Hands-on weatherization enrollment support and space heating conversion is being tested in the Energize heat pump pilot in Skyway and White Center with prioritization for low-income and senior households; a rental improvement program element is also being tested. A solar component of Energize will begin in 2024.
	 highest impact in energy savings and carbon reduction. In coordination with utilities, a program would include LED replacement, weatherization, and conversion to efficient, low-carbon water and space heating systems. 	2025	The King County Energize program secured 103 heat pump installations in Skyway and White Center, with 87 installations funded directly by King County and 16 facilitated through partner agencies. In 2025, Energize is expanding to install heat pumps, other electric appliances, and weatherization improvements in 150-200, homes, adult family homes, and family home childcares. The program coordinates with utilities and other area providers, and maximizes use of available rebates for program installations. In 2025, King County also secured a \$50 million EPA Climate Pollution Reduction Grant (CPRG), which will help fund improvements for adult family homes, family home childcares, affordable multifamily housing and community service buildings through 2030 in King, Kitsap, Snohomish and Pierce counties.
GHG 3.02.02	 Create a website/central information hub that educates residents on programs, incentives, financing options, and energy-saving technologies. Increase awareness about existing programs via the proposed resource hub and other County programs that work with residents and businesses. Work with stakeholders to provide materials in culturally relevant languages with culturally relevant examples/methods. 	2023	King County is coordinating with partners on the development of a regional or statewide energy navigator pilot program to guide households on electrification rebates, available financing, and local contractors. The pilot would include a campaign to raise awareness of technologies such as heat pumps, induction stoves, and heat pump water heaters and provide materials in multiple languages.
		2025	King County, the K4C and regional partners collaborated with the Building Decarbonization Coalition (BDC) to launch the Switch is On (SIO), a web information hub with resources and rebates by zip code. The SIO was intended to be a bridge until a statewide hub was established, with possible SIO adoption by the state. Through 2025, SIO partners will monitor state efforts to establish a building decarbonization navigator program and evaluate if SIO should be retained and, if so, how to fund.
GHG 3.02.03	Implement residential point-of-sale energy disclosure.	2023	K4C, along with partners, supported statewide Home Energy Score legislation that would have enabled standardized energy assessment and reporting at the sale of a home (HB 1433; Energy labeling of residential buildings). ECO and Department of Local Services staff have engaged regional partners in program research, but dedicated staff and program resources would be needed to develop and implement a program.
		2025	In the 2025 legislative session, King County monitored and supported a state bill that would have supported residential disclosure (HB 1015), though the bill did not move forward. By December 2025, ECO will conduct a preliminary GHG analysis on this strategy and, if viable, investigating resources that could support implementation.

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GHG 3.03.01	Propose Strong Green Building Codes in Unincorporated King County. The King County Permitting Division will transmit to the King County Council new green building code requirements for residential and nonresidential buildings. New requirements will be informed by King County staff and RCC recommendations. Proposed requirements may include renewable energy and energy efficiency, water efficiency and reuse, C&D material management, materials with low embodied carbon and toxicity, EV infrastructure, TOD, sustainable transportation, and other green building codes applicable to new and existing buildings that are appropriate for unincorporated King County.	2023	Ordinance #19485 was transmitted in 2021 and adopted in 2022 with strong energy codes, notably achieving provisions that would reduce greenhouse gas emissions from fossil fuel space- and water-heating, and would require some renewable energy generation, in new commercial buildings and multifamily buildings four stories tall or taller. Separately, ordinance #19316 added EV charging and infrastructure requirements for new buildings and parking lots, and substantial improvements to buildings and parking lots. Additional building code revisions planned for 2023 are on track.
		2025	A draft ordinance and SEPA checklist have been developed for updates to KCC Title 16 which include proposed green building code requirements for new commercial and non-residential construction. The proposed ordinance is scheduled to be transmitted to Council in fall 2025.
	Completing the Energy Code Delta. King County Permitting Division will track each code amendment cycle for the Washington State Energy Code (WSEC) conducted by the Washington State Building Code Council (SBCC) to determine if the cumulative amendments developed by the SBCC have met the cycle goals in order for newly constructed residential and nonresidential buildings permitted under the 2031 WSEC to achieve a 70 percent reduction in net annual energy consumption, compared to those permitted under the 2006 WSEC. If the SBCC is unable to achieve the desired percentage of reduction, the Permitting Division may transmit to King County Council either amendments to the King County Energy Code that will result in unincorporated King County meeting the requirements of RCW 17.27A.160 or the amendments that have been adopted by the City of Seattle.	2023	Ordinance #19485 was transmitted in 2021 and adopted in 2022 with strong energy codes, notably achieving provisions that would reduce greenhouse gas emissions from fossil fuel space- and water-heating, and would require some renewable energy generation in new commercial buildings and multifamily buildings four stories tall or taller. Separately, ordinance #19316 added EV charging and infrastructure requirements for new buildings and parking lots, and substantial improvements to buildings and parking lots. Additional building code revisions planned for 2023 are on track.
		2025	A draft ordinance and SEPA checklist have been developed for updates to KCC Title 16 which include proposed green building code requirements for new commercial and non-residential construction. The proposed ordinance is scheduled to be transmitted to Council in fall 2025.
GHG 3.04.01	Partner with PSE to promote fossil-based natural gas conservation per the Clean Buildings Act (HB 1257, 2019).	2023	Work under this priority action has shifted to focus on partnering with building owners and organizations to support the successful implementation of the Clean Buildings Act and focus on building decarbonization as part of implementation. King County has worked with PSE and other partners to promote use of CPACER as a tool to support Clean Buildings Act compliance. ECO is adding staff capacity with a Building Decarbonization Program Manager to coordinate.
		2025	King County has monthly meetings with Seattle City Light and PSE representatives on retrofit program developments. In 2025, King County also secured a \$50 million EPA CPRG Grant which will fund staff to provide support on financing improvements with building owners. Staff are working to assess what buildings in King County are subject to the Clean Buildings Act, and to determine a set program to consistently support compliance via fossil fuel reductions. ECO building decarbonization programs are no longer supporting gas conservation and instead promote switching from fossil fuel systems to appliances powered by clean electricity alongside electrical efficiency interventions.
GHG 3.04.02	Collaborate with stakeholders, including labor and utilities, to develop energy codes that support the transition to highly efficient and low-carbon non-residential and multifamily buildings through the conservation of fossil fuels, use of renewable natural gas (RNG), electrification, and implementation of sewer heat recovery.	2023	Since 2021, King County has been working with industry and jurisdictional partners to communicate our strong support to the Washington SBCC for the development of energy codes that focus on increased building efficiency and decarbonization. Actions include strategizing with partners, participating in Council meetings, providing testimony in support of strong codes, and coordinating sign-on letters communicating our shared stance.

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		2025	The 9 th Circuit Court ruling determining that the ban of natural gas is unconstitutional has impacted WA State code development, in that the WA SBCC will reopen the 2021 Energy Code amendment process throughout 2025 to accept new proposals that will be in greater compliance with the laws. King County and partners will continue to participate in this process to encourage codes that drive toward building decarbonization.
GHG 3.05.01	Develop a program to convert oil and propane heated homes to clean sources of energy in partnership with community groups, utilities, and organizations. Prioritize the conversion for low-income and senior residents.	2023	Oil heated home conversion is supported in the Energize heat pump pilot in Skyway and White Center, with prioritization for low-income and senior households. A solar component of Energize will begin in 2024.
		2025	In 2024, the Energize pilot program converted 30 oil-heated homes to electric heat pumps for low- and moderate-income households. King County has decommissioned 15 of these oil tanks to date. The 2025 Energize program anticipates converting 20-30 oil- or propane-heated homes to electric heat pumps.
GHG 3.05.02	Lower financial and logistical barriers for conversion to low/zero-carbon cooking, space and water heating equipment in existing built environment.	2023	ECO has added staff capacity with a Building Decarbonization Program Manager lead to coordinate work on community scale efforts. In 2023 and 2024, King County will be leading the Built Environment working group in the four County Puget Sound region preparing a plan and grant proposals to the U.S. EPA CPRG coordinated by PSCAA.
		2025	Support for conversion to low/zero-carbon cooking, space and water heating equipment is largely being executed under the Energize retrofit program; see GHG 3.02.01. Under GHG 3.02.02 and the Switch is On information hub, ECO has done induction stove cooking demonstrations, and will be conducting additional outreach at the 2025 State Fair. Finally, the CPRG grant application noted in the 2023 update was awarded to King County, supporting expansion of retrofit activities.
GHG 3.06.01	Enact code to phase out new fossil fuel infrastructure in the built environment within King County jurisdiction.	2023	Ordinance 19485 was transmitted in 2021 and adopted in 2022 with strong energy codes, notably achieving provisions that would reduce GHG emissions from fossil fuel space- and water heating, and would require some renewable energy generation, in new commercial buildings and multifamily buildings four stories tall or taller. Separately, Ordinance 19316 added EV charging and infrastructure requirements for new buildings and parking lots, and substantial improvements to buildings and parking lots. Additional building code revisions planned for 2023 are on-track.
		2025	A draft ordinance and SEPA checklist have been developed for updates to KCC Title 16. SEPA posting is scheduled for March 2025. The proposed ordinance is scheduled to be transmitted to council in fall 2025.
GHG 3.07.01	Support the adoption of a statewide or regional low carbon fuel standard that gradually lowers pollution from transportation fuels and legislation that supports the production and use of renewable fuels.	2023	Washington Clean Fuel Standard was adopted in 2021 and went into effect in Jan 2023. King County was actively involved in advocacy for during the 2021 legislative session, including partner coordination and providing supportive testimony. From 2021-2022, King County was actively involved in the rulemaking process, submitting several comment letters in coordination with partners to advocate for more stringent reduction targets, pro-equity implementation, and ensuring program requirements facilitated local government fleet owners participation as a credit generator.
		2025	King County Metro and DNRP have registered and are generating credits via the Clean Fuel Standard. King County advocates and convenes partners to ensure the Clean Fuel Standard is strengthened and defended as a key state climate policy.
GHG 3.07.02	Seek to increase production of biogas at King County's landfill and wastewater treatment plants as detailed in the Operations section of this focus area.	2023	WTD is actively engaged in efforts at its three regional treatment plants to increase biogas utilization. Current plant-specific efforts include: developing long-term biogas optimization strategies for each of its regional treatment plants that will strive for the ability to capture and beneficially use as close to 100 percent, and no less than 95 percent, of the biogas created during the wastewater treatment processes at the plants. Actual beneficial use will be determined as strategies are further developed and implemented.

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		2025	The biogas-to-energy cogeneration system at WTD's West Point Treatment Plant has significantly increased operational uptime and electricity generation since the third quarter of 2024, as compared to recent years. Additionally, updated biogas optimization strategies for each regional treatment plant are either completed (South Plant) or will be completed in 2025 (West Point and Brightwater). The renewable biogas facility at the Cedar Hills Landfill is on track to go back online by the third quarter of 2025. Additional details are also provided in the updates to GHG 3.20.01 and 3.21.01.
GHG 3.08.01	Participate in rulemaking and other actions that support equitable and accelerated transition to clean energy supplies as required by the Clean Energy Transformation Act.	2023	King County engaged with partners in the rulemaking for the Clean Energy Transformation Act. King County has also worked with partners to provide written comment in support of natural gas decarbonization efforts by PSE.
		2025	King County Climate Office and departments continue to coordinate with electric utilities to support their efforts to transition to clean electricity, including supporting additional state legislation to enable faster deployment of clean energy, participating in integrated resource planning efforts, and exploring partnerships to deploy solar.
GHG 3.08.02	Advocate for increased grid reliability through state and utility regulatory rulemaking and legislation that supports demand response and storage technologies that reduce peak load and provide grid flexibility.	2023	King County has participated in Washington Clean Electricity Transformation Act advocacy and participation including: PSE focus groups on demand response and storage; coordination with K4C elected officials; and comprehensive plan updates to support distributed energy.
		2025	ECO has a representative on Seattle City Light Integrated Resource Plan advisory board to support increased deployment of clean energy and distributed energy resources. Climate team members also coordinate regularly with PSE on their efforts to deploy clean electricity, pilot time of use rates, and incentivize battery energy storage.
GHG 3.08.03	Clean Energy Policy: Partner through the K4C and with local utilities, state regulators, and other stakeholders on a countywide commitment to clean energy resources. This includes meeting future energy needs through deep energy-efficiency improvements and improved management of peak demands, increasing the state solar net metering threshold, and supporting renewable	2023	In partnership with K4C, King County has identified solar net metering as a top legislative priority and supported efforts to update statewide net metering policy in the 2022 legislative session.
	generation and fuel resources while phasing-out fossil fuels.	2025	King County Climate Office has worked with K4C elected officials and staff to support state legislation to expand the net metering cap and enable deployment of clean energy. State legislation to expand the net metering threshold has stalled. However, federal and state incentives and grants for solar and electric appliances expanded significantly in 2023 and 2024. King County support update to the 2024 King County Comprehensive Plan to align commitments to clean energy resources.
GHG 3.08.04	Collaboration with Energy Utilities: Partner through the K4C and participate in utility Integrated Resource Plan and Energy Plan development processes and emphasize interests for acceleration of transition and equitable distribution of benefits through regulatory and rulemaking forums.	2023	In partnership with K4C cities and PSE Green Direct customers, King County coordinated and led effort to ensure rate agreement terms aligned with King County customer needs. ECO and departments continue ongoing engagement with Seattle City Light and PSE partners.
	benefits through regulatory and rulemaking forums.	2025	King County extended the County's Green Direct agreement with PSE through 2040. This guarantees that King County government facilities in PSE territory consume renewable electricity through 2040. ECO staff participate in Seattle City Light's Integrated Resource Plan advisory board.
GHG 3.09.01	Local Government Action: Partner through the K4C and with utilities to develop a package of local jurisdictional commitments and initiatives that support renewable and distributed energy sources that direct the region toward a robust and resilient utility system. Actions include supporting community solar development, green power community challenges, streamlined local renewable	2023	King County has worked with partners to support utility renewable energy offerings such as the PSE Green Direct, and coordination on energy code improvements through the K4C and Regional Code Collaboration. Looking ahead, ECO's new Building Decarbonization Program Manager will expand efforts to connect local jurisdictions and residents with new renewable energy incentives available through state and federal funding.
	energy installation permitting, district energy, code development, and renewable energy incentives.	2025	In October 2023 the Building Decarbonization Manager joined ECO, with ECO supporting exploration of district energy pilot projects. Initiative 2066 has been a hurdle for additional green building code development, though the County is tracking court decisions on I-2066 that may affect future codes. Additionally, a green building cohort has recently been formed within the K4C to assess local government green building priorities.

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GHG 3.10.01	Prioritize low-income and underserved communities with community solar or shared ownership models. This priority action may be coordinated with Puget Sound Sage's 100% Cities Project.	2023	Examples of efforts that King County has explored and lead with partners include Solar for All, and planned Energize Solar expansion. Virtual net-metering is currently limited to utilities, expansion will require regulatory change. Cost has been a barrier for Community Solar expansion.
		2025	ECO has been in discussions with PSE, Seattle City Light, and the Washington State University (WSU) Community Solar Expansion Program on opportunities to develop a community solar project. ECO also continues to track the Solar for All federal grant award with the state. ECO is anticipating piloting solar installations on approximately 10 homes as part of the 2025 Energize Program. In addition, ECO is exploring developing a pilot community solar project, though this initiative may face hurdles; please see GHG 3.23.01 for additional detail.
GHG 3.11.01	Work with the Office of Performance, Strategy and Budget to develop energy-efficiency investment guidelines, focused on payback criteria and when to pursue energy-efficiency investments that don't meet life cycle cost-effectiveness criteria.	2023	King County Office of Performance, Strategy and Budget (PSB) is engaging in conversations with agencies to connect them with resources available to support energy efficient investments. Guidance has been developed by PSB, to support agencies to pursue investments supported by life-cycle cost effectiveness assessments. Including opportunities for flexibility to allocate additional resources for energy and greenhouse gas reduction efforts, at their discretion, based on agency priorities and standard agency review processes.
		2025	Guidance has been developed and endorsed by PSB that agencies shall actively pursue life cycle cost effective projects that reduce energy or water use, or increase solar energy generation, and shall bring forward to PSB for discussion any investment opportunities that are in keeping with SCAP goals (e.g. fossil fuel reduction) that are not life-cycle cost effective.
GHG 3.11.02	Adjust the Fund to Reduce Energy Demand (FRED) County agency loan program to fund projects that are life cycle cost-effective up to an operational life of up to 20 years.	2023	PSB will continue to fund the Fund to Reduce Energy Demand (FRED) projects with a 10-year loan term. However, extended loans will be made available as necessary when the cost effectiveness or equipment life justifies an extended term (e.g., solar panel systems with a 25-year warranty).
		2025	No progress or change since 2023. FRED loans have not been requested by any County agency for over two budget cycles. Loans are still available if perceived by an agency as necessary or the best approach to fund an energy project.
GHG 3.12.01	Create additional accountability of capital project managers and county agencies to ensure life cycle cost-effectiveness criteria are used for capital and maintenance investments that impact energy and water consumption.	2023	Some project managers are using life-cycle cost-effectiveness criteria to reduce the energy, greenhouse gas emissions, and cost impacts of projects. However, agencies need additional accountability structures to be developed by ECO in coordination with the Capital Project Management Work Group (CPMWG) to ensure there is consistent and formalized integration into capital projects.
		2025	Limited water data availability has been a barrier to track and improve water consumption. Enhanced water utility billing data will be regularly imported. Draft baseline and conservation targets under development. Reducing water use is an ongoing action proposed in the 2025 SCAP.
GHG 3.13.01	Educate project managers and maintenance staff about utility incentives, technologies and low-cost actions that offer resource efficiency potential.	2023	Trainings for project managers and maintenance staff have occurred, however, these do not occur on a regular basis to ensure all staff have the training needed. The Energy Task Force and green building program will work together in 2024 to offer future trainings, in coordination with local energy stakeholders such as the Lighting Design Lab and Smart Building Center. Future trainings will likely also welcome K4C staff participation.
		2025	Climate and Workforce team has completed green custodial certification trainings for Metro staff. The King County Green Building Team has conducted multiple trainings for capital project manager and supported multiple King County Climate Action Talks.

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		Continue coordination with local energy stakeholders such as the Lighting Design Lab and Smart Buildings Center, as well as Energy Task Force and Green Building Team.
Report to division and executive leadership at least once a year on energy eduction progress and actions.	2023	Reporting has occurred frequently with division and executive leadership. Integrating energy goals into agency-specific Strategic Plans has helped ensure that agencies track energy reduction as part of their key performance indicators. Data availability and accuracy issues from PSE are creating challenges and inefficiencies to regularly monitor data, requiring King County staff to spend significant time on data clean up and quality assurance.
	2025	Data availability and accuracy issues from PSE continue to be an issue. In 2025, Metro, DNRP, DES, and the Department of Local Services (DLS) will start using new utility database upgrades which will allow for quicker and more accurate data availability for energy and water.
Analyze and evaluate opportunities and challenges related to increased eleworking, with the intent of minimizing energy use while ensuring healthy and safe work spaces.	2023	Implications for GHG emissions reductions from reduced energy use at County facilities was analyzed as part of the Future of Work assessment and transition to hybrid work models. Opportunities to realize reduced energy use in facilities have been limited (e.g. even if fewer staff are in the office, heating/cooling comfort levels still need to be maintained, and several facilities remain 24/7 inperson operations).
	2025	See 2023 update.
All County agencies shall inventory all fossil fuel uses in each of their facilities, including space heating, water heating, backup generator operations, and other needs. • Establish a cross-departmental effort to focus on fossil fuel reductions in the top 20 highest building and facility consumers of natural gas, which make up over 90 percent of County natural gas consumption. • Investigate opportunities to reduce the use of carbonbased fuels for backup generators, and minimize fuel needed for generator testing,	2023	 A comprehensive inventory of fossil fuel-using equipment is nearly complete across King County agencies. This has included equipment inventories at dozens of County facilities. Examples of projects completed and underway include: High-efficiency and low/no fossil-fuel HVAC retrofits and replacements are being pursued at a number of facilities that use natural gas, including Transit and Wastewater facilities. In 2023, the recreation pool at the King County Aquatic Center converted a natural gas boiler to a high efficiency heat pump system to heat the pool and air. Installing electric heat pumps and high-efficiency condensing boilers at South Treatment Plant to reduce natural gas use.
while ensuring equipment will function properly during emergencies.	2025	The South Wastewater Treatment Plant, King County government's largest natural gas consumer, installed condensing boilers to reduce use by ~7 percent. Heat pumps installed at the site will go online in Q2 2025, further reducing natural gas use by 20 percent to 40 percent.
All agencies will create fossil fuel elimination action plans that detail the projected end-of-life date of each piece of fossil fuel-consuming equipment, and non-fossil fuel replacement and retrofit options. Pursue opportunities to educe natural gas, heating oil, and propane consumption in facilities where eplacement with non-carbon alternatives is not cost effective or logistically easible.	2023	Staff have shifted focus to opportunities for eliminating fossil fuel at facilities that are being developed through the inventory assessments and capital planning processes, rather than development of comprehensive elimination plans. Cost estimates of conversions from natural gas to fossil fuel-free solutions are frequently finding high incremental cost for all electric options. Additional support and resources are required to complete projections of how to achieve elimination through operational and capital changes. Where applicable, compliance with the Washington Clean Buildings Act and City of Seattle Building Performance requirements are supporting development of plans to reduce energy and natural gas use.
	2025	Where applicable, work is underway for compliance with the Washington Clean Buildings Act and City of Seattle Building Performance requirements are supporting development of plans to reduce energy and natural gas use. Facilities such as the Steve Cox Community Center are focusing on efforts to install heat pump systems to partially replace natural
	eport to division and executive leadership at least once a year on energy eduction progress and actions. Inalyze and evaluate opportunities and challenges related to increased eleworking, with the intent of minimizing energy use while ensuring healthy and safe work spaces. Il County agencies shall inventory all fossil fuel uses in each of their facilities, cluding space heating, water heating, backup generator operations, and other eeds. Establish a cross-departmental effort to focus on fossil fuel reductions in the top 20 highest building and facility consumers of natural gas, which make up over 90 percent of County natural gas consumption. Investigate opportunities to reduce the use of carbonbased fuels for backup generators, and minimize fuel needed for generator testing, while ensuring equipment will function properly during emergencies. Il agencies will create fossil fuel elimination action plans that detail the rojected end-of-life date of each piece of fossil fuel-consuming equipment, and non-fossil fuel replacement and retrofit options. Pursue opportunities to reduce natural gas, heating oil, and propane consumption in facilities where eplacement with non-carbon alternatives is not cost effective or logistically	peport to division and executive leadership at least once a year on energy eduction progress and actions. 2025 2026 2027 2028 2028 2029 2

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			cost-effective energy efficiency measures, including potential electrification of natural gas HVAC and water heating equipment (North Base, South Base & Component Supply Center, Atlantic-Central Vehicle Maintenance Building, East Base, and Ryerson Base).
GHG 3.17.01	Develop County policy for the elimination of fossil fuel use in new construction, with minor exceptions for backup power, food service, and limited industrial processes for which electric alternatives do not exist.	2023	Most King County capital projects are no longer installing new fossil fueled equipment. However, lack of consistent, formal accountability across all capital projects and maintenance purchasing is a barrier. Development of a formal policy requiring that only equipment for which there is no practical non-fossil-fuel alternative is available can be installed is under development by ECO in coordination with agencies.
		2025	See 2023 update.
GHG 3.18.01	Work with outside stakeholders such as jurisdictions, resource efficiency advocates and equipment vendors to reduce project implementation costs of advanced energy-efficiency technologies.	2023	On-call contracts are being utilized by many County agencies for HVAC and electrical work, and now with a newly established solar contract. Further work is needed to determine if K4C jurisdictions could piggyback on these contracts. County agencies have also been streamlining energy efficiency services through the utilization of the state's Energy Savings Performance Contracting program.
		2025	Work order contracts for solar, electrical, and HVAC work have, when utilized, simplified project delivery and reduced costs. Numerous Energy Saving Performance Contracts (ESPC) across divisions are also streamlining project delivery. New work order contracts in at least two agencies will further streamline future solar installations.
GHG 3.19.01	Research the feasibility and economics of consuming County-produced or utility-provided RNG as an alternative to carbon-based fuels, when natural gas use cannot economically or feasibly be eliminated.	2023	Utility-provided RNG is currently at a price premium. Options are being investigated to determine if RNG generated from County operations could be available in the future.
	use cannot economically or feasibly be eliminated.	2025	Opportunities are available to purchase County-produced RNG. The challenge is pricing that would result in natural gas cost two to three times the current costs, to generate revenue comparable to selling the RNG to non-County markets. Further analysis will focus on the maximum price for agencies to spend on RNG, in consideration of the associated GHG reduction of the fuel.
GHG 3.20.01	 Make the following improvements to the LFG collection system at the Cedar Hills Regional LandfillBy 2025, SWD will: Improve north flare station electrical infrastructure to ensure operational integrity of the system and maximize gas collection; Conduct an LFG collection system upgrade feasibility study that could enable remote adjustment of landfill wellfield to increase efficiency and quality; Replace LFG collection valves with precision valves that can be more finely tuned to improve landfill gas collection volumes and gas quality; Increase inspections and adjustments of LFG collection wells; evaluate 	2023	The Cedar Hills Regional Landfill's North flare station electrical infrastructure improvements have been completed. Twenty new vertical wells are being installed in 2023, with planning for 58 or more additional wells by 2025. A real-time landfill gas well monitoring system has been installed on select wells, to allow for adjustments to improve gas collection based on operating conditions. After piloting the system on dozens of wells, in late 2023, the system was removed from the horizontal wells, but remains in place and provides valuable data for a number of vertical wells. • Precision valves have been installed on several wells and additional valves will be installed in early 2024. • Landfill gas technicians have been identifying landfill gas flow anomalies with support from engineers to quickly identify and respond to system malfunctions. Data collected through the real time landfill gas well monitoring system have contributed to the quicker identification of issues. • Landfill emissions in Area 7 were reduced with installation of final cover in 2021-22.
	 the location of the wells; repair landfill liner tears, malfunctioning valves, and other issues that are increasing emissions; and Reduce landfill emissions in Area 7 by installing a final cover in 2021. 	2025	The SWD completed an Investment Grade Audit (IGA) that provides a framework and vision for an optimal LFG piping system that maximizes and optimizes LFG and liquids collection and management while minimizing fugitive emissions. As of early 2025, the Cedar Hills Regional Landfill is at 30 percent design for the most significant expansion of its vertical well system in over a decade, expected to significantly improve LFG collection
			In December 2024, WA Ecology awarded the SWD a \$2.63 million Climate Commitment Act grant award that will advance SCAP commitments to monitor and reduce fugitive methane and increase the productive use of LFG.

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GHG 3.20.02	Renewable Biogas Optimization: By the end of 2021, King County will set Cedar Hills Regional Landfill renewable energy generation targets and track progress toward such targets. See Strategy A.13 in the Appendix V: Operational Energy and GHG Guidance for details.	2023	Landfill gas collections are down as compared to 2019 and prior levels. SWD has established targets of five percent to 15 percent annual improvement in landfill gas collection. Gas collection and gas delivery to BioEnergy Washington is being tracked and daily evaluations of the performance of the landfill gas collection system are being identified for maintenance and repaired.
		2025	The 2025 SCAP proposes updated landfill gas collection optimization targets to improve collection at the Cedar Hills Regional Landfill by at least five percent per year (25 percent total) from 2025 through 2030, compared to a 2023 baseline.
GHG 3.20.03	Closed Landfills: By the end of 2023, conduct landfill gas emission studies at the Vashon, Duvall, Houghton, and Puyallup closed landfills to better assess the GHG emissions and to develop treatment plans. Complete design improvements and installation by 2025.	2023	The landfill gas emission studies at the Vashon, Duvall and Cedar Falls have been completed. The GHG emissions are well controlled at Vashon and Cedar Falls landfills by the existing cover system. Duvall was the only landfill with emissions among the three landfills. SWD is in the process of preparing the alternative analysis to reduce emissions at Duvall and is on schedule to complete design improvements and installation at the Duvall landfill by 2025. Budget constraints have limited ability to conduct studies for Houghton and Puyallup landfills. The results from the Duvall study and improvements project will be relevant for the Houghton and Puyallup site conditions.
		2025	The SWD installed a new biofiltration cover at Duvall to reduce vertical emissions from the closed landfill. The cover material was selected after a rigorous assessment that evaluated three Solid Waste closed landfills (Duvall, Cedar Falls, and Vashon Island) and their three different cover systems (clay, High-Density Polyethylene (HDPE) geomembrane, and HDPE geomembrane above low permeability soil) to model how the utilization of compost as biofiltration cover might reduce emissions. The study determined that the Duvall landfill could benefit from bio filtration whereas Vashon and Cedar Falls' detectable fugitive emissions were too low.
GHG 3.20.04	Fugitive Emissions. Explore and evaluate alternative methods to estimate landfill gas emissions not captured by the LFG colletion system ("fugitive emissions"). Assess new technologies that can be implemented to reduce total landfill gas generation and decrease or capture fugitive emissions.	2023	Annual reports are being generated by an external engineering consultant to provide a more accurate estimate of actual fugitive emissions. This new approach is based on nuanced aspects of the gas collection system and the local climate at Cedar Hills landfill.
	ianum gas generation and decrease of capture ragitive emissions.	2025	The SWD continues testing and use of new technologies that improve the measurement and calculation of fugitive landfill emissions including building on recent LFG drone monitoring efforts, which began in 2024, through use of a third-party contractor. Initial results from this effort have improved response times to LFG leaks and provided an improved understanding of LFG emissions locations.
GHG 3.21.01	Wastewater Biogas Optimization: By December 31, 2021, the WTD will create 2025 and 2030 biogas optimization goals for its three regional treatment plants.	2023	WTD is actively engaged in efforts at its three regional treatment plants to increase biogas utilization. Current plant-specific efforts include: developing long-term biogas optimization strategies for each of its regional treatment plants that will strive for the ability to capture and beneficially use as close to 100 percent, and no less than 95 percent, of the biogas created during the wastewater treatment processes at the plants. Actual beneficial use will be determined as strategies are further developed and implemented. In a typical year, between 60 percent and 75 percent of the combined biogas available at the plants is put to beneficial use and the remainder is flared. In 2021 the sales of biogas-derived RNG and environmental attributes at South Plant, along with renewable electricity produced at West Point, generated over \$10.5 million of revenue for WTD.
		2025	The 2025 SCAP proposes 2025 and 2030 wastewater biogas targets that a combined 75 percent or more of available biogas is sent to a productive use. Additionally, that by 2030 WTD will have capital projects in place that will provide for the capacity to process for beneficial use 100 percent of the biogas created during the wastewater treatment process by 2035.
GHG 3.21.02	Assess the feasibility and economics of using RNG generated at County facilities for use in County operations.	2023	At WTD's South Treatment Plant, RNG generated between \$8 million and \$9.5 million per year. This revenue is reinvested in carbon reduction and other environmental actions. Significant revenue would be reduced if gas were to be used in County facilities. It may be feasible at Cedar Hills Regional Landfill pending any future negotiations for control of landfill gas volumes.
		2025	See also GHG 3.19.01. Opportunities are available to purchase County-produced RNG. The challenge is pricing that would result in natural gas cost two to three times the current costs, in order to generate revenue comparable to selling the RNG to non-County markets. Further analysis of the maximum price for agencies to spend on RNG, in consideration of the DNRP agencies will evaluate the potential and economic of re-directing County-produced RNG to their facilities.

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GHG 3.21.03	Identify the potential for public-private partnerships to maximize the generation of renewable energy from all available biogas at County wastewater treatment facilities.	2023	WTD's Brightwater Wastewater Treatment Plant is currently pursuing a public-private approach for a biogas-to-energy facility at the site. The effort is on a trajectory to have a formal project scoped and developed, for Council approval, in 2024.
	treatment facilities.	2025	A biogas IGA was completed for the Brightwater Treatment Plant. The IGA includes analysis of alternatives to put all of Brightwater's biogas to beneficial use and generate RNG or electricity with the plant's biogas, as well as public or private processing system ownership options. WTD is analyzing the IGA options for consideration of next steps.
GHG 3.22.01	New facilities shall install 0.25 watts per square foot of solar power, per the guidance of Strategy A8 in Appendix V: Operational Energy and GHG Guidance.	2023	The commercial energy code for Washington State now requires 0.5 watts per square feet, exceeding the 2020 SCAP guidance.
		2025	King County is exceeding code minimum requirements at several facilities. New solar PV array nearing operation at DNRP's Parks Central Maintenance Facility (480kW) and in construction at the new South County Transfer Station (437kW). Metro's South Annex Base reached final design with ~3MW (3,000 kW) of solar PV proposed. WTD's new West Point Treatment Plant Power Quality Building installed 80kW of solar that went online in 2024.
GHG 3.23.01	Support community solar projects that enable non-homeowners and those with fewer financial resources to participate in the clean energy economy.	2023	King County facilities have proposed county-owned sites suitable for community solar projects to PSE. To date, PSE has not been interested in developing projects due to cost barriers (land-based solar costs at two landfills, and structural reinforcement costs at the Elections building). The County is in discussions with PSE about the possibility of a smaller landfill community solar site, given the potential for support dollars through newer state and federal carbon reduction programs.
		2025	The County submitted a joint PSE/King County community solar proposal for the Vashon Landfill for a state grant in 2024, but the project was not selected. In the 2025 state legislative session King County staff tracked and supported two bills to expand community solar funding access, though neither progressed to a floor vote. Subsequent conversations with PSE have not landed on a community solar project at a county facility. State funds for community solar projects managed by Washington State University provide potential but are only available to non-profits and utilities.
GHG 3.24.01	The County will work with the local electric utilities to better quantify the GHG impacts of their hydroelectric resources.	2023	Efforts in this area have focused on the availability of non-hydroelectric renewable power for County facilities. Future conversations will be necessary to have broader discussions about the long-term pros and cons of hydroelectricity resources.
		2025	No progress since 2023. Ongoing research is needed to understand the evolving science related to hydropower resources and GHG emissions from associated reservoirs.
GHG 3.24.02	As of July 1, 2020, all electricity purchased by King County government is greenhouse gas neutral.	2023	King County receives Seattle City Light's carbon-neutral electricity, and specifically is contracting for "Green Direct" 100 percent renewable electricity from PSE. However, small amounts of electricity from newer electricity accounts in PSE's service territory are not procuring 100 percent carbon-free electricity.
		2025	King County now has a 20-year term Green Direct contract in place for 100 percent renewable power secured for nearly all facilities in PSE's service territory through 2040. Before the end of 2025, King County will evaluate the pros and cons of participating in Seattle City Light's Renewables Plus 100 percent solar renewable program.
GHG 3.25.01	Support private sector district energy and heat recovery projects to heat and cool buildings by using the embodied energy in wastewater flowing through the regional wastewater conveyance system.	2023	WTD has Council authorization for a pilot of up to three such district energy and heat recovery projects, structured as public-private partnerships. One project is in construction in the South Lake Union neighborhood, to be operational by the end of 2025.
		2025	Construction of the first pilot project is finished and expected to begin operation in Q3 2025. The WTD sewer heat recovery program has continued to field information requests from potential users and other interested parties (other utilities, public/private schools, NPOs, regulators, etc.).

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GHG 4.01.01	Provide education to unincorporated area customers. On an on-going basis and in coordination with other King County departments, the King County Permitting Division will develop educational materials on sustainable practices and techniques for green building and site development. This information shall apply to new construction, additions, retrofits, and remodeling projects in unincorporated King County, and shall be developed and provided in such a way that all people have access to this information and opportunity.	2023	Updates to the Green Building Handbook (GBH) began at the end of 2022 and should be complete by the end of 2023. The handbook provides guidance on how to incorporate an array of green building methods and materials to homeowners, architects and contractors. Since 2021, DLS Permitting Division has provided guidance for applicants on upcoming green building codes that will soon be required for construction projects as well as prepared guidance for applications such as the Solar Incentives and Permit Process Guide and (EV Parking Requirements. In 2023 a database was compiled of current green building incentives, loans, grants, tax rebates, and loans that are available for jurisdictions, developers, landowners, and homeowners to apply for. This database will be updated regularly and is intended to be posted online in late 2023.
		2025	The Green Building Code Handbook updates were published in April 2024. The handbook was fully translated into Amharic, Chinese (Simplified), Spanish, and Vietnamese in August 2024. The additional translations of Khmer and Korean were completed in January of 2025. Two additional translations will be completed by December 2025 – these will include Russian and either Tagalog or Ukrainian. A Metro ad campaign was launched in December 2024 with 50 buses circulated throughout south King County communities sharing awareness about the handbook. In 2025, a partnership with the DNRP-SWD Green Schools program is being explored for an art contest showcasing the handbook contents. By December 2025, all translations of the handbook will be available in King County libraries.
GHG 4.01.02	Provide additional resources. The County shall leverage staff resources across the DLS to support in the development of codes, policies, incentives, educational outreach materials, permit applicant coaching, and programs	2023	The Green Building Handbook (see GHG 4.01.01) edits are projected for completion & posting in late 2023. New energy code web and bulletin materials are posted online.
	associated with green building, as well as the efforts outlined in this focus area.	2025	The Green Building Code Handbook updates were published in April 2024. An ordinance that includes strong Energy Code amendments, required deconstruction, and C&D material management appendices are scheduled for adoption in fall of 2025. The Green Building Planner position and Energy Review positions in DLS-permitting have been reallocated and are not currently staffed.
GHG 4.02.01	Code development through the Regional Code Collaboration (RCC). In partnership with cities, counties, and stakeholders from across the Puget Sound region, lead and participate in the RCC to develop stronger and more consistent residential and nonresidential development codes for green building that will apply to new construction, altered existing buildings, and building sites. Resulting codes may include, but are not limited to the following: renewable energy and energy efficiency, water efficiency and reuse C&D material management, materials with low embodied carbon and toxicity, low impact development, EV infrastructure, TOD, sustainable transportation, and development that supports affordable housing, and that is in support of the Living Building Challenge.	2023	In 2021, the Regional Code Collaboration (RCC) developed codes associated with C&D material management, EV charging infrastructure and 2018 Energy Code amendments in alignment with City of Seattle's codes that focused on decarbonization. The RCC then encouraged and actively supported local adoption of these codes. In 2021 and 2022, King County staff submitted these codes to the Washington SBCC, participated in Council meetings, provided testimony, and were successful in ensuring these requirements will be inserted in the 2021 Washington State Building and Residential Codes. These codes are likely to take effect in 2024. In 2023, King County staff have been working with jurisdictions on the adoption of optional appendices that focus on C&D material management, deconstruction, and solar-readiness.
	In partnership with the RCC, King County will participate in state, national, and local code development processes to develop and support codes that will enable the achievement of County GHG emission reduction targets. Examples of code development processes to engage in include Washington SBCC, International Code Council, and the Washington State legislature.	2025	King County staff continued to participate actively in the Washington SBCC to support strong 2021 Energy Code amendments. King County worked closely with City of Seattle to develop strong 2021 Energy Code amendments for unincorporated King County that will exceed the State Energy Code and will continue to encourage other jurisdictions to do the same. Through the fall of 2025, staff will continue to convene stakeholders and participate in the development of 2024 amendments through the SBCC process, driving increased EV charging infrastructure, and heat island mitigation requirements.
GHG 4.02.02	Partner with King County cities on C&D recovery and reuse. King County will work with and support city partners and partnering agencies to implement codes, policies, and incentives resulting in the maximum recovery and reuse of	2023	King County is working with several cities to implement code updates on C&D recovery and reuse. Additional support will be needed achieve the goal of eight cities by 2025.

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	structural and nonstructural components of existing structures. King County's goal is for at least eight cities to have taken one of these steps by 2025.	2025	The cities of Kenmore and Redmond have adopted C&D codes. Outreach and support to additional cities, in support of C&D code adoptions, will continue through 2025.
GHG 4.03.01	Propose strong green building codes in unincorporated King County. The King County Permitting Division will transmit to the King County Council, new green building code requirements for residential and nonresidential buildings. New requirements will be informed by King County staff and RCC recommendations. Proposed requirements may include: renewable energy and energy efficiency, water efficiency and reuse, C&D material management, materials with low	2023	Ordinance 19485 was transmitted in 2021 and adopted in 2022 with strong energy codes, notably achieving provisions that would reduce greenhouse gas emissions from fossil fuel space- and water heating, and would require some renewable energy generation, in new commercial buildings and multifamily buildings four stories tall or taller. Separately, Ordinance 19316 added EV charging and infrastructure requirements for new buildings and parking lots, and substantial improvements to buildings and parking lots. Additional building code revisions planned for 2023 are on-track.
	embodied carbon and toxicity, EV infrastructure, TOD, sustainable transportation, and other green building codes applicable to new and existing buildings that are appropriate for unincorporated King County.	2025	A draft ordinance and SEPA checklist have been developed for updates to KCC Title 16, which include proposed green building code requirements for new commercial and non-residential construction. The proposed ordinance is scheduled to be transmitted to council in fall 2025.
GHG 4.03.02	Completing the energy code delta. King County Permitting Division will track each code amendment cycle for WSEC conducted by SBCC to determine if the cumulative amendments developed by the SBCC have met the cycle goals in order for newly constructed residential and non-residential buildings permitted under the 2031 WSEC to achieve a 70 percent reduction in net annual energy consumption, compared to those permitted under the 2006 WSEC.	2023	The 2018 Washington state energy code analysis showed it was not meeting incremental targets despite strong gains; energy use reductions were at 30.4 percent for commercial, compared to a target of 35 percent for 2018 codes. To address this delta, Ordinance 19485 was transmitted in 2021 and adopted in 2022 with strong energy codes mirroring Seattle energy code amendments, notably achieving provisions that would reduce greenhouse gas emissions from fossil fuel space- and water heating, and would require some renewable energy generation, in new commercial buildings and multifamily buildings four stories tall or taller. Additional building code revisions planned for 2023 are on-track.
	If the SBCC is unable to achieve the desired percentage of reduction, the Permitting Division may transmit to King County Council either amendments to the King County Energy Code that will result in unincorporated King County meeting the requirements of RCW 17.27A.160 or the amendments that have been adopted by the City of Seattle.	2025	A draft ordinance and SEPA checklist have been developed for updates to KCC Title 16 which include proposed green building code requirements for new commercial and non-residential construction. The proposed ordinance is scheduled to be transmitted to council in fall 2025.
GHG 4.03.03	Propose strong C&D recycling codes. By the end of 2021, the King County Permitting Division will transmit to the King County Council, codes associated with C&D material diversion requiring the submission of a salvage assessment, building removal hierarchy assessment, C&D material diversion report, the delivery of C&D material from job sites to King County designated C&D facilities, and a minimum of two bins on each job site (for recyclable materials and non-recyclable waste). Assist King County cities with adopting similar requirements.	2023	C&D codes were not transmitted to the King County Council in 2021. However, adoption of the optional C&D codes appendices are being considered for transmittal in the next round of 2021 building code amendments for unincorporated King County. King County staff have been meeting with several cities likewise considering adoption of these appendices.
		2025	A draft ordinance and SEPA checklist have been developed for updates to KCC Title 16 which include proposal to adopt the International Building Code and International Residential Codes appendices for C&D debris. The proposed ordinance is scheduled to be transmitted to council in fall 2025.
GHG 4.04.01	Remove barriers to green affordable housing development. King County, in partnership with the RCC and other public and private entities, will explore policies that help to remove barriers and increase access to safe, healthy, affordable housing. Areas of exploration may include: equitable access to affordable housing, how to encourage the development of green buildings, barriers to financing efficiency standards that exceed minimum code	2023	The desired next step in implementing this strategic action is to host a workshop where all representatives involved in affordable housing buildings can gather to share their perspectives on process and barriers with the intent that solutions can begin to be developed. With support this can be completed by the end of 2024. Format and structure may shift to an interview format to build upon recent work led by partners, including Department of Community and Housing Services, Housing Development Consortium, among others.
	requirements, and programmatic needs of building occupants. The RCC will then develop identified codes and policies that can be used to increase the development of, and access to, green affordable housing.	2025	Since this Priority Action was developed, the affordable housing community has taken great strides to cultivate stakeholders resulting change at the state level, so this work is happening through forums such as the Housing Development Consortium. King

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			County has not had the resources to proceed forward with this effort as written. There are 2025 SCAP priority actions proposed to support work in this area, that will require additional resources to advance the work.
GHG 4.05.01	Use King County Metro Equitable Transit-Oriented Communities (ETOC) Policy. King County Metro shall lead advancing sustainable development practices in projects on County-owned real property and support the inclusion of best practices to advance King County's SCAP in green building through the implementation of the King County Metro ETOC. Metro shall require TOD projects to achieve advanced green building certification. Metro shall pilot new technologies and/or processes to advance	2023	Guided by Metro's adopted Equitable Transit Oriented Communities (ETOC) policy, Metro has developed a TOD tool for use in designing Bus Rapid Transit service. Metro is actively planning two TOD projects at the Burien and Kenmore transit centers, is closing the first phase of TOD at Northgate and has identified others. Metro is working on an RFP for TOD in Burien where we will incorporate new language and goals around green building as a part of the future project.
	environmental sustainability when possible, and work with regulators to allow the use of these advanced methods where appropriate. King County will also encourage the use of the Metro ETOC Policy, or better, in TOD not owned by King County to reinforce the expansion of equitable efforts, affordability, and green building countywide.	2025	Metro's TOD program continues to support the K-line RapidRide project in developing a TOD study to inform the station selection and identify development opportunities in the corridor. Metro is developing the RFP for development at the Burien Transit Center for release in 2025. The Burien RFP will incorporate new language and goals around green building/sustainability per the ETOC policy.
GHG 4.06.01	Financial and development incentives. King County shall work in partnership with local utilities, financing institutions, and other partners to create financial assistance and development incentives for single family, multifamily, and commercial building owners in King County. Incentives can be utilized to make financially feasible energy and water efficiency upgrades to existing buildings, encourage green building practices in new construction, and increase green building certifications.	2023	The Green Tools team secured \$300k in grant funding that will be used for green affordable housing grants that will assist in increased access to carbon neutral practices and strategies to existing single family homes for income-qualified residents. Work is underway now to plan for implementation, which will begin in 2024. King County has developed and launched a CPACER program that enables commercial and multi-family property owners to finance efficiency, renewable and resiliency improvements to their facilities. Through mid-2023, six projects funding \$80 million of energy and water improvements have used the program. Hands-on weatherization enrollment support is being tested through the Energize heat pump pilot in Skyway & White Center. A solar component of Energize will begin in 2024.
		2025	SWD invested \$300,000 in the Energize Program, increasing its capacity by 10 heat pump installations.
GHG 4.06.02	Financial and technical support for green affordable housing. King County, in partnership with other public and private entities, will encourage and support the development of green affordable housing by pursuing potential financial and technical support that will help to bridge the financial delta between code minimum buildings and buildings built with above code efficiencies, lower	2023	In 2021, King County applied \$5,500,000 in Climate Equity Capital Pool Funds to several projects. Four affordable housing and homeownership projects that have received DCHS Housing Finance Program funding received these additional dollars which will be used to incorporate green building elements that are above what the code requires. One project will achieve zero energy and the remaining three will focus on energy & water efficiency EV charging and healthy materials.
	embodied emissions, lower embodied carbon, and healthier indoor air quality.	2025	All Climate Equity Capital Pool funds were distributed. The Southard, an affordable homeownership project awardee in Tukwila is now occupied. The project is beginning the one-year reporting period, to achieve ILFI Zero Energy Certification. The Friends of Youth alteration project in Kirkland is completed and occupied, providing healthy housing for young adults. This project was supported by climate equity dollar funds.
GHG 4.07.01	Implement the King County Green Building Ordinance (GBO). Require all County capital projects to meet a Platinum level using the LEED rating system or King County's Sustainable Infrastructure Scorecard, or an approved alternative rating system.	2023	In 2021 and 2022, 97 percent and 89 percent of completed projects achieved Platinum level, respectively, using the King County Sustainable Infrastructure Scorecard or LEED rating system. The SWD Division GreenTools Program coordinates an interdepartmental Green Building Team to support and provide accountability for King County capital projects. Some but not all King County departments have formal structures for capital project management (i.e. gate checks and milestones), the lack of a formal structure of review and accountability presents a barrier to ensure integration of green building requirements early in the capital planning process consistently for all projects. In 2024, ECO will work with department who do not have these processes in place to create them.

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		2025	In 2023 and 2024, 88 percent and 95 percent of completed projects achieved Platinum, respectively, using the King County Sustainable Infrastructure Scorecard or LEED rating system. One project achieved LEED Platinum (WTD) and seven projects achieved Salmon Safe certification (PKS). New guidance requires all Divisions to submit 30 percent Scorecards to the Green Building Team Program Manager and ECO for enhanced performance tracking and to ensure projects are on target to achieve Platinum. The Green Tools Program will continue to coordinate the inter-departmental Green Building Team and will provide trainings and resource to ensure 100 percent of capital projects achieve the highest green building standard.
King County will update the Green O&M Guidelines Handbo County divisions will assess which Green O&M strategies ar implemented and create an inventory of strategies that nee agency will identify priorities for incorporating new green of	Incorporate sustainability in operations and maintenance (O&M). By June 2021, King County will update the Green O&M Guidelines Handbook. By 2022, King County divisions will assess which Green O&M strategies are being implemented and create an inventory of strategies that need attention. Each agency will identify priorities for incorporating new green operations and maintenance practices in each division's line of business. If additional resources are needed these will be incorporated into 2023-24 budget proposals. County	2023	Due to staffing limitations from individual divisions, project has been on hold. Operations and Maintenance staff in Depts/Divisions are short staffed and time has been prioritized to higher priority needs. Staff capacity is not available to audit current practices and develop update. COVID related staffing and emergent issues have also been a barrier. Creating a Green Team for O&M has been suggested as a way to assist individual divisions in working collaboratively to advance this strategic action and identify and prioritize strategies that need attention.
	are needed these will be incorporated into 2023-24 budget proposals. County divisions have flexibility to select standards most applicable to their line of business, either the King County's Green Operations and Maintenance Guidelines Handbook or use of existing third-party standards (e.g., LEED for Building O&M).	2025	King County has standardized recycling at King County facilities and improved energy efficiency efforts at facilities. WTD is developing Green O&M manual for WTD facilities underway in 2025. King County is pivoting toward using third-party certification standards, and training employees rather than development of unique King County standards. In partnership with the Climate and Workforce Program, Metro Transit Facilities specialists were certified using the Green Custodian Health Program developed in partnership with the U.S. Green Building Council.
GHG 4.07.03	Improve equity and social justice efforts by supporting capacity building with small contractors, consultants and community leaders to effectively meet County's equity and social justice priorities.	2023	Effort has been made to work with project managers and project teams to increase awareness of opportunities to integrate Equity and Social Justice (ESJ) in projects. Trainings have been provided to capital project teams, consultant firms, contractors and community based organizations (CBO).
		2025	The 2023 King County Sustainable Infrastructure Scorecard update included 14 points focused on advancing economic justice. The PRISM Team developed an ESJ Dashboard to track ESJ performance. Several divisions held two open house sessions to empower small businesses and foster connections to create increased pathways for Minority and Women-Owned Business Enterprise (MWBE) participation in King County contracts. DNRP-SWD Green Tools contract for technical assistance was made available to all divisions to support ESJ efforts and additional MWBE subs were added to provide ESJ technical assistance. In 2025, a training course will be launched for ESJ credits in capital projects.
GHG 4.07.04	research private and public sector models for "green leasing" incentives, standards, and requirements and make recommendations for provisions that could be tailored to leases for long-term tenants of King County-owned properties and facilities. The intent of these provisions is to improve energy	2023	Green leasing policy has been included in the updated adopted GBO, codified in KCC in 2022. Multiple County divisions worked collaboratively to develop policy that will be used by private development on leased county properties.
	efficiency, reduce GHG emissions, and reduce water use by tenants of Countyowned buildings and property.	2025	See 2023 update.
GHG 4.08.01	Update Sustainable Infrastructure Scorecard. Update the Scorecard by December 31, 2021, to reflect 2020 SCAP targets and other King County	2023	The King County Sustainable Infrastructure Scorecard will be updated by the end of 2023. Extensive development has already been done by county divisions, building industry, and community leaders. Training will be provided to King County capital project managers and team members in 2024 and on-demand resources will also be developed.

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	priorities. This update will include establishing a threshold of which projects should have third-party certification, such as LEED or Envision.	2025	King County launched the updated 2023 King County Sustainable Infrastructure Scorecard. The latest edition includes eight categories with 111 total possible points and an optional set of credits for enhanced performance. The update connects to ESJ, SCAP, and Clean Water Healthy Habitat goals. Review and analysis of many third-party green building rating systems were considered for updated content. WTD updated its scorecard to better align with the new King County Sustainable Infrastructure Scorecard. Sustainable Infrastructure Scorecard eLearning course was developed by CPMWG and Green Tools was launched in NeoGov and made available for all capital project managers and teams.
GHG 4.09	Develop accountability and enforcement mechanisms to audit performance of capital projects, and better integrate these mechanisms into Capital Improvement Program (CIP) and budget processes. Require GBO and SCAP performance tracking to be done at agency management and leadership levels.	2023	Additional resources have been made available through the CPMWG. Checklists created and provided to project managers to cover sustainability policies including SCAP, GBO, ESJ, and Clean Water Healthy Habitat. Established annual GBO audit process in 2023.
	performance tracking to be done at agency management and leadership levels.	2025	In alignment with GBO, annual audit process selected two projects randomly to audit. In 2023, the audited projects were from KCIA/Airport and WTD. The King County Auditor's Office performed a review of the Green Building Program data and reporting processes in 2023.
			In 2025, the Green Building team will continue the annual GBO auditing process – select two projects from two Divisions randomly and perform audit. Implement results and update reporting approach in response to Green Building Program audit. ECO hired a Green Building and Infrastructure Manager to help design and implement a framework to address audit results.
GHG 4.10	Establish material standardization for high embodied emission materials, such as concrete, asphalt, wood, and compost. This will be led by Consumption and Materials Management Section.	2023	WTD led reducing embodied emissions in concrete effort with Green Building Team representatives from various County divisions. Policy and Technical committees were created to develop pilot efforts, example practices and guidance. This effort is in coordination with Sustainable Purchasing Program and SCAP Materials and Consumption Focus Area Priority Action. Coordination to integrate approaches developed beyond WTD, to other departments have been paused due to limited staffing resources.
		2025	See GHG 5.08.01 Low Carbon Materials in Capital Projects for progress update
GHG 4.11.01	Increase water efficiency and reduce potable water use. King County will establish water baseline for county facilities and operations and collect comprehensive water data from multiple utilities (not available for all County facilities). Establish new water use reduction targets compared to a 2020 baseline: 5 percent water use reduction by 2025 and 10 percent by 2030.	2023	ECO was able to secure a part-time TLT position to create a water use baseline. Data collection for baseline information is proving extremely difficult due to the dozens of water utilities serving King County, and the inconsistencies by which water use is billed. Baselining and tracking will likely require significant additional staffing to hand enter bills. This level of staffing is not currently dedicated to this action.
	Reduce project-specific potable water use on all projects using best management practices.	2025	Creating a water baseline proved extremely difficult given the variety of billing systems and approaches from the dozens of local water utilities
GHG 4.12	Establish project-specific potable water reduction use requirements for all projects using menu of credit requirements from existing green building certification rating systems. Identify opportunities for water reductions in	2023	Evaluation of opportunities for water use reduction and recommendations are under development.
	existing buildings, such as installing low flow aerators/faucets, high efficiency toilets, irrigation controls and drip systems.	2025	King County Sustainable Infrastructure Scorecard includes water reduction measures in the menu of credits for capital projects. Examples include the installation of high efficiency toilets and planting drought tolerate landscaping that do not require irrigation.

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GHG 4.13.01	Develop operational carbon neutral projects. By 2025, King County will identify and will make substantial progress in the design, construction or certification process for at least 20 Zero Energy or Living Building Challenge projects. King County's commitment to LBC Volume Certification will provide registration and certification cost reductions, efficiency in certification documentation, and a streamlined approach to meeting performance standards. For projects with	2023	As of 2022, there are 13 projects officially registered with the International Living Future Institute for either Zero Energy or Petal Living Building Challenge certification. Four additional projects that were registered have not moved forward with the certification due to COVID budget impacts, financial constraints, or Federal Aviation Administration determinations. One Zero Energy project has completed Zero Energy certification. Two Living Building Challenge projects are in construction. Three Zero Energy projects are in performance period.
	limited resources or while technology is not yet attainable, encourage the ability to achieve 50 percent or 75 percent of energy needs with on-site renewable energy.	2025	To date, the county identified 25 potential ZE or LBC projects. Two ZE projects have been certified – DNRP-Parks North Utility Maintenance Shop and DNRP-SWD Vashon Island Transfer Station. Four projects are completed and are in the performance period: (Zero Energy Projects) Willowcrest in Renton, Cottage Lake Bathroom by DNRP-Parks, Friends of Youth Kirkland multifamily affordable housing, and (Net Zero Energy) at The Southard in Tukwila by Homestead Community Land Trust. Two LBC Petal projects are in construction: DNRP-Parks Parks Maintenance Facility Building, DNRP-SWD South County Recycling and Transfer Station. Metro Transit South Annex Base LBC Petal project is in the design phase, and there is construction under way at the Zero Energy Enumclaw Transfer Station DNRP-SWD project. Grants have been received or been submitted on four DNRP Zero Energy projects. Nine projects from WTD, Metro, and KCIA have been canceled due to budget and service impacts. In 2025, JUST certification is being pursued to support LBC Petal projects to achieve Equity Petal.
GHG 4.14.01	King County capital portfolios will be managed to maximize GHG emissions reductions in operational and embodied emissions. They will use the following strategies: • Comply with GBO: Continue GBO requirement: LEED, King County Scorecard, or other approved rating system Platinum for all projects. • No new natural gas or fossil fuel powered equipment installed, with exceptions for generators and specialized equipment where an all-electric version is not feasible. All electric option must be included in alternative analysis and include cost of carbon in life cycle cost	2023	Resources have been made available through the CPMWG, including a Sustainability Requirements checklist for Capital Projects to identify opportunities during planning and design phases of projects. No new natural gas or fossil fuel powered equipment installed requirement is a prerequisite credit in the King County Infrastructure Scorecard. Significant progress has been made to pursue all energy-efficiency measures for each system type that pay back over the total life of the equipment. Cost is a barrier and a challenge for maximizing on-site solar energy installation, especially for industrial infrastructure projects. Departments are on track with meeting electricity need with Green Direct or equivalent programs with local utilities. Feasibility assessment of net zero certification for facilities is completed on an ad hoc basis. More trainings are needed to develop proactive implementation processes to reach net zero goal of 100 percent of King County new construction and whole building renovation projects achieve net zero construction and operations by 2030.
	 Pursue all energy-efficiency measures for each system type that pay back over the total life of the equipment. Maximize on-site solar energy installation (or other renewable) when cost-effective over the warrantied life of the system (generally 25 years). Install to the greatest extent it pays back over the life of the project/equipment. If renewable energy production is not feasible at construction, make facility solar ready for future installation. Carbon neutral electricity from utility: For all electricity needs not met through on-site generation, continue to source carbon neutral electricity from Seattle City Light or through Green Direct or equivalent from PSE and Snohomish County Public Utility District. Feasibility assessment of net zero certification: All facilities over 5,000 square feet must be assessed for feasibility toward high efficiency/low carbon performance. Facilities under 5,000 sq. ft, or other infrastructure, should be assessed for feasibility according to divisionspecific criteria. Facilities that cannot feasibly reach net zero must strive toward the highest efficiency, lowest carbon design and construction possible. Divisions shall report on results of feasibility assessments to the Climate Leadership Team. 	2025	A checklist was created for CPMWG to provide an easy resource to divisions and project teams to incorporate these efforts in project delivery. The strategies are also reiterated in individual projects, through eco-charrettes, project scope of work and deliverables, and implementation of GBO requirements and scorecard credits. Continued process improvement opportunities can be done, such as addressing ongoing barriers exist to ensure that GBO is consistently considered across the enterprise in planning before capital projects are established and for all capital project phases from project initiation to alternatives analysis, to baseline and closeout.

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	 Net Zero Certification: By 2030, 100 percent of King County new construction and whole building renovation projects achieve compliance. 		
GHG 5.01.01	Deliver zero waste of resources plan (ZWORP). To ensure that materials of economic value are reused and recycled, and the extraction of natural resources are minimized, King County will need to take multiple actions over the next decade. Following the work of the Responsible Recylcing Task Force (RRTF), King County will focus on plastic, paper, and organics recycling education, policy, and market and infrastructure development. This includes expanding Extended Producer Responsibility (EPR) systems, which encourage better design and use of recycled feedstock, and building new recycling infrastructure, so underserved communities have equitable access to recycling collection facilities across the County. King County will develop and implement a ZWORP that will set out King County's strategies to meet the 2030 zero waste of resources commitment in the SCAP.	2023	The Zero Waste of Resources Plan, known as the Re+ Strategic Plan, was launched in February of 2023. Of the nine actions included in the plan, five have been implemented successfully: establish the Re+ Community Panel, kick off Re+ City Grants and Circular Economy Grants, conclude the first iteration of the business innovation platform, pass progressive organics legislation, and sign King County cities on to support Re+ (24 cities have pledged support as of October 27, 2023). Work is underway to advance the other four actions: EPR statewide legislation, Non-Residential Food Waste Recycling, Mixed Waste Processing, and Single Family Organics Collection Policy.
		2025	The statewide Organics Policy Legislation (HB 2301) passed, embedding policy into County contracts and providing technical assistance. King County single-family organics collection model ordinance is under review. Non-residential food waste recycling efforts include submitting the Organics Management Proviso Report to the Council. The Re+ Community Panel (12 members) gives input on EPR policy, grants, organics, and updates to the 2025 SCAP. Combined 25 cities (72 percent of waste) pledged support through the Re+ City Pledge. The EPR bill is advancing in the WA State Legislature. A mixed Waste Processing study is underway.
GHG 5.01.02	Deliver regional organics plan. King County's vision is that organic material waste is prevented, reduced, recycled and ultimately reused locally. There is significant opportunity to develop a regional selfsustaining circular system, where organic material is processed and returned to the soil, helping it to absorb and store more carbon. Adopted in 2019, this plan sets out to expand and enhance the regional market for compost, reduce wasted resources and contamination, and expand regional organic material processing.	2023	SWD signed a universal compost agreement in 2020 that extends through March 2025. Staff, with the help of its contracted technical assistance expert, hosted a series of presentations to King County agencies, cities, and other partners on the benefits, uses, and application of compost in County-related projects. Through its CompostWise program, the SWD developed guides, videos, and a compost calculator to reduce barriers to utilize compost in projects.
		2025	Since October 2023, Phase I of the Compost Procurement Ordinance was completed, launching procurement reporting for King County capital projects via PRISM. SWD submitted the County's first compost tracking data to the WA Ecology, establishing a baseline for local processing and procurement. By December 2025, initial recommendations will be expanded upon, including procuring a universal compost purchasing agreement through 2028 (with extension potential to 2030). CompostWise will enhance technical assistance and training for industry experts,
			while Phase II will develop systems to track compost procurement via Goods & Services Contracts. Pending USDA funding, CompostWise will also collaborate on compost trials and farmer support initiatives.
clir par foc init	climate change and through efforts highlighted in the 2015 SCAP, dividends are paying off as King County, its residents, businesses and institutions are seeing food waste at the landfill fall. However, the County will continue to increase initiatives to tackle food waste in the landfill and set out the approach in the Zero Waste of Resources Plan during 2021: • Decrease food waste generation – prevent through education and	2023	SWD played a central role to the development of the passed 2022 WA Organics Management Law that centers on diverting organics from landfill. SWD's Food: Too Good to Waste program received budget support in the 23-24 biennium to provide education and actionable tips to prevent food waste. SWD partnered with WA Ecology and 46 jurisdictions across the Washington in a collective participation in the 2023 National Food Waste Prevention Week.
		2025	In 2025, King County advanced organics policy by supporting HB 2301 and developing additional legislation HB 1497 both related to improving organics waste management. The Commercial Organics Technical Assistance program reached 130+ businesses, piloting an organics diversion incentive. SWD hosted the Organics Regional Summit and expanded the Food Too Good to Waste program through Hopelink Food Markets and ESJ-centered partnerships. Research milestones included a Co-digestion Facility Analysis and Consumption Emissions Toolkit development. SWD contributed to food donation policy and regional waste reduction strategies while preparing Phase II of the Compost Procurement Ordinance. Upcoming efforts include expanding commercial outreach and updating Title 10 for organics collection requirements.

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GHG 5.01.04	Resource Recovery SWD will evaluate whether the materials that have been landfilled at the Cedar Hills Regional Landfill should be considered to have economic value and whether resource recovery is recommended to recoup some of this value and produce additional benefits for the landfill. SWD should consider using external consultant services to evaluate the benefits, feasibility, and costs of resource recovery.	2023	SWD evaluated the potential for resource recovery via landfill mining as part of past Business Plans and studies. The evaluation found that this approach has a high cost (\$10-\$18 per ton of excavation, 2016 dollars), low recycling recoverability (average is potentially 25 percent of tons excavated was recyclable), disrupts planned landfill maximization work (developing Area 9, facilities relocation), and potential for environmental harm from digging up the landfill and releasing fugitive gases including methane. As a result this approach was not recommended. Since this evaluation was completed, the balance of costs and benefits of this strategy have not changed sufficiently to warrant a reexamination – for landfill operations the focus remains on reducing landfilling of recyclable materials, minimizing fugitive landfill gas emissions of the landfill waste, and maximizing the amount of the landfill gas that is recovered that is used as a renewable energy resource.
		2025	See 2023 update.
GHG 5.02.01	Develop circular economy framework. Global emissions are not falling fast enough and often the emissions that arise from how food and products are designed, made, and used are overlooked. Working across the supply chain will mean supporting a system that encourages designing out waste and pollution to reduce GHG emissions, keeping products and materials in use longer to	2023	Re+ plan launched setting out King County's vision and work on the circular economy. The plan includes new circular economy grants & Renew Seed grants awarding over \$2.2 million. Grants have been awarded for launching and co-funding circular economy materials accelerator and a circular economy city grant.
	retain their embodied energy, and regenerating natural systems to absorb and store more carbon in soil and products. The complexity of this shift is significant, and there is not a single measure or set of actions that will deliver a circular economy. By 2021, King County will develop a new circular economy vision and plan for action, consistent with our 2030 and 2050 climate and zero waste of resources goals.	2025	Re+ City Grants included \$390,000 for KC cities: 5 projects funded, representing 12 cities. Re+ Circular Economy Grants cycle 1 was completed with \$2.3 million funded 14 projects. In 2025, the NextCycle Seed Grant Program is planning a mini-grant program of up to \$10K in collaboration with Communities of Opportunity. The Re+ City Grant Planning Cycle 2 will begin. SWD will begin planning the timeline and process for updating the Re+ Strategic Plan.
GHG 5.02.02	GHG 5.02.02 Support the transition to a reusable wood market. Under the current building development practices, buildings are constructed out of new materials and then demolished, with the demolished wood combusted as a one-time energy source. Instead, the demolished wood should be salvaged and processed into new wood products that capture the embodied carbon for at least another 20, if not 200, years. These products can be reused in future buildings. The County will dedicate resources to catalyze the movement of wood markets away from combustion and toward higher value uses that are more sustainable for both the environment and the people of King County.	2023	SWDs C&D Program has advanced education and awareness on the value of unpainted/untreated salvaged wood, as an alternative to landfilling or using for hog fuel. A virtual salvage lumber tour was provided in 2022, and in 2023, a C&D Summit and C&D tour were organized to showcase market value and strategies for the reuse of salvaged wood, with participants from government, building industry, C&D specialists, and dozens of agencies, universities, private companies, and community leaders. A Salvaged Lumber Warehouse and Business Park Work Plan was co-developed with industry and CBOs. C&D and Deconstruction training has been co-developed with CBOs offering professional development to BIPOC, under-represented, and previously incarcerated individuals.
		2025	In partnership with City of Seattle, King County SWD secured \$7.3 million in support of a circular economy for salvaged lumber (CESL). Funds are through two separate federal grants which are now jeopardy. Seattle released an RFP for \$4 million to establish and operate a salvaged lumber warehouse. Hiring began for 1 FTE within ECO to coordinate the King County CESL program manager as part of the US EPA CPRG Grant program. By the end of 2025, we expect the City of Seattle funded salvaged lumber warehouse to be operational, to have hired an ECO CESL program manager and grant program to support local wood supply and markets will be underway.
GHG 5.03.01	Increase recycling rates for materials collected in King County. In 2016, King County's recycling rate was 56 percent, and recent recycling rates have remained flat. As stated in its 2019 Comprehensive Solid Waste Management Plan, King County has a goal to reach a 70 percent recycling rate for materials collected in its solid waste service area (all cities in King County except Seattle	2023	Recycling rates lag due to information needed from WA Ecology. Preliminary estimates for 2021 indicate that King County recycling rates remain flat at a 56 percent recycling rate. To make progress on this action SWD released the Re+ Plan in early 2023. At the Washington State legislative level, improvements have been observed resulting from the statewide organics bill. There has not been success to adopt the EPR bill considered by the legislature, lack of regulatory support will slow progress on diverting paper and plastics.

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	and Milton); this plan took longer to develop than expected, which slowed initial work on increasing this recycling rate. To begin to make progress on this action, the Zero Waste of Resources Plan will set out King County's approach to increase the amount of material recycled and to measure progress on reuse, recycling, and disposal.	2025	King County continues to work with cities, haulers, and other partners on recycling system improvements, such as enhanced recycling at King County owned transfer stations (see GHG 5.04.01 and GHG 5.04.02). Additionally, the County continues to advance more comprehensive recycling solutions with a focus on EPR. As an example of the collaboration on this, King County led a joint 2025 comment letter with the mayors of 11 cities urging support to pass the Recycling Reform Act (HB 1150). This bill will modernize WA's recycling system and make the state one of the first U.S. states to implement EPR. Additional details of how the SWD is working with cities to improve recycling rates are also provided in the progress update to GHG 5.03.02.
GHG 5.03.02	Partner with cities. Partner through the Metropolitan Solid Waste Management Advisory Committee on policy, projects, and programs focused on (1) waste prevention and reuse, (2) EPR, recycling, and composting, and (3) beneficial use.	2023	Presentations to cities on the Re+ program began in July 2022, with more than 30 given by June 30, 2023. Cities are also being asking to sign a Re+ Pledge, which outlines the principals of the Re+ program. To date, 24 of 37 cities have signed the pledge. Next steps include identifying a policy to implement countywide and partner with cities on adoption and implementation. In addition, Re+ City Grants are expected to be awarded to five projects covering 12 King County cities that further the Re+ goals by the end of 2023.
		2025	To date, 26 cities have signed the Re+ Pledge, with the second cycle of Re+ City Grants launching in April 2025 to fund projects that advance a circular economy. The first cycle awarded \$390,000 across five projects in 12 cities. In 2025, SWD will develop a city engagement plan focused on increasing recycling and composting rates in high-waste cities. SWD will also collaborate with partners and processors to maintain glass recycling infrastructure, ensuring regional accessibility. Technical assistance will support food waste prevention, hauler contract improvements, policy development, and other tailored city needs.
GHG 5.04.01	Develop new recycling infrastructure. SWD will open a new South County Recycling and Transfer Station in 2023 and has begun work on a new North County Recycling Transfer Station, set for opening in 2028. All new recycling and transfer stations will meet the Living Building Challenge/Net Zero Energy (see Green Building focus area), safety and environmental standards,	2023	The South County Recycling and Transfer Station (SCRTS) is in progress and on track. The project is targeted as a Living Building Challenge Petal Certified project. Project construction has begun (NTP issued 5/1/2023) and substantial completion is expected in February 2026. The North County Recycling Transfer Station (NERTS) is in progress, but the siting process and Environmental Impact Assessment are being closely monitored. Project is still on track to select a site by mid-2024 and open in mid-2029.
	accommodate projected growth in the region, incorporate best practices in transfer and transport operations, and offer a wide variety of recycling opportunities for residential and business customers.	2025	At South County Recycling and Transfer Station a suite of recycling services will be implemented in 2025. South County Recycling and Transfer Station construction is ongoing and expected completion in 2026. Final siting process of North County Recycling Transfer Station (NERTS) to be completed by 2025. The NERTS project is still on track to select a site by March 2025 and to open in 2029.
GHG 5.04.02	Increase recycling of key materials at transfer stations. To achieve the transfer station recycling targets, SWD will continue to support existing self-haul bans, pursue new bans when markets and processing capacity exist, and propose recycling fees that cover operating costs.	2023	Transfer Station Recycling has increased substantially since 2015, factors such as a waste acceptance rule, self-haul bans, increased focus on public customer outreach and education along with creating Standard Operating Procedures for Transfer Station Operators and Supervising Operators have led to major progress towards goal. More recently progress has stalled. SWD has proposed plans to increase staffing and invest in more and better equipment.
		2025	King County added mattress collections at five transfer stations after the pilot project at Bow Lake. SWD added scrap metal collections at Houghton, Renton, and Algona Transfer Stations. SWD continues ongoing material recovery efforts. In 2025, SWD will continue planning for the Renton Transfer Station Redevelopment project and increased focus on material recovery from the waste at tipping floor.
GHG 5.04.03	Develop new and improved recycling operating practices. There is significant potential to reduce transportation emissions by implementing more sustainable management and transport of materials. Through process improvement, it is anticipated that up to 3,000 MTCO2e fewer emissions could	2023	Recycling compactors have been installed at all modern compactor stations, reducing the number of hauls transporting recyclables. Balers are scheduled to be installed at five stations between 2023 and 2024 to further decrease the number of trips. SWD Operations is transitioning to using larger trailers to transport recycling further reducing hauls for materials like Cardboard, Mattresses, and CFC appliances. Roll-off trucks have been purchased to more efficiently manage internal hauling service, rather than be dependent on vendors to haul.

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	be realized through improved transport and hauling practices for recycling commingled and carboard materials by 2025.	2025	SWD cardboard baler was replaced at Bow Lake Transfer Station which increased capacity and uptime. SWD installed cardboard balers at Enumclaw and Factoria Transfer Stations and two stationary compactors at Bow Lake Transfer Station as part of a remodel optimization construction project. SWD-Operations is now hauling baled cardboard specifically at Bow Lake, Enumclaw, and Factoria. SWD-Operations purchased yard ramps and trailers for loading baled cardboard, mattresses and appliances at Enumclaw and baled cardboard at Factoria. In 2025, SWD will continue planning organics receiving Area at Vashon Transfer Station and baler buildings at Vashon and Shoreline Transfer Stations.
GHG 5.05.01	Support customer-centered Sort it Out program. The SWD will support staff to engage with customers at the transfer stations to further divert recyclable materials by "catching" these materials before they are tipped and redirecting them to the appropriate recycle bin. Station staff are key to unlocking this potential, as engaging with customers is critical to maximizing transfer station recycling. Developing the Sort It Out engagement at transfer stations has the most GHG emission reduction to 2025.	2023	Following findings from a Customer Engagement Pilot at Bow Lake in 2021, Operations is now staffing a Transfer Station Operator position on the public deck at Bow Lake whose primary duty is to engage, guide, direct, educate, and enforce rules with public customers. This position is currently filled with overtime hours, to ensure sustainability and to expand this program to other transfer stations will need to hire more Transfer Station Operators.
		2025	SWD-Operations has hired more full-time staff to guide, direct, and educate customers at Transfer Stations. SWD is continuing to guide, direct, and educate customers at Transfer Stations and expand and improve trainings for operations staff. The 2025 SCAP includes ongoing work related to this priority action.
GHG 5.06.01	Internal waste prevention and recycling. To create a unified waste management system across County operations, King County will standardize these systems, including containers, signage and procedures for garbage, recycling, and compost by the end of 2025. In 2020–2021, strategies will be identified and piloted to improve waste management practices and services at select facilities, including solid waste transfer stations, wastewater treatment facilities, and maintenance facilities. By 2023, a comprehensive inventory of current County facilities waste management and recycling will be conducted, and all downtown office buildings will have standardized collection contracts, bins, signage, and recycling procedures. From 2024 until 2025, King County will roll out standardized waste management systems to the remaining outlying buildings, as well as trainings for employees regarding waste prevention and reuse practices, using lessons learned from office buildings and the initial facilities.	2023	FMD standardization of waste management system in downtown office buildings is underway; specifically, piloting two 3-stream systems at a few locations. DNRP pilot projects are complete. Model projects launched at the DNRP field sites include: Restroom paper towel collection for composting at WLRD Environmental Lab building; extensive new reusable plastic water bottle program for summer field staff at Marymoor Park; expanded conference room recycling, including rooms used by the public, at WTD South Plant Administrative Building.; internal recycling collection efficiencies and new battery recycling at SWD's Cedar Hills Landfill. Those projects were all requested and launched by employees. Sustainability Stewards are in place at the four locations.
		2025	DES-FMD piloted multiple 3-stream waste stations in a couple of FMD locations and has selected standards for front and back of the house locations. In 2025, for FMD managed facilities work will include reviewing the standards with custodial staff to ensure meeting labor requirements/standards and development of a plan for deployment in King Street Center and Chinook, including coordination with SWD on outreach/education efforts
GHG 5.07.01	efficiencies countywide, through new procurement practices and the use of MPS. MPS have been shown to reduce energy use, printing costs, and the number of printers, copiers, paper, and toner purchased through pilot implementation. By 2021, King County will establish a new contract for	2023	A contract for MPS was executed in June 2021 with Woodburn. In December of 2022, KCIT policy ITG-P-22-03-01 was executed standardizing print to MPS and high-volume multi-function devices. King County has been working with the established vendor, Woodburn, to move devices that were on lease to MPS under Woodburn with a target of 80 percent of leases transitioned to MPS by July 2024.
		2025	The MPS project team has partnered with a local small business specializing in MPS, as well as liaisons across departments, to transition the County's print devices from leases to MPS. This transition is an ongoing process with projected five-year savings of \$4.5 million and other benefits such as better copier utilization, enhanced IT security, and standardized service requests. By the end of 2025, all 606 copiers in the project scope will be transitioned away from leases to MPS, which will contribute to the cost savings, efficiency, and security of the County's print fleet as well as reduced environmental impacts.

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GHG 5.07.02	Build markets for compost and other recycled content materials. To achieve a circular economy, to improve the health of the recycling system and to achieve the maximum GHG reductions, materials that enter the recycling stream need to be made into new products. King County can affect the marketplace through policies and programs and further support the demand for recycled materials in the region because it purchases a wide range of goods and services. To achieve this objective, King County will further develop its procurement and technical assistance programs for the purchasing of products with recycled content, which will include developing standard specifications for a suite of materials. The County will focus its market development efforts on organics, paper, and plastic because of their relatively high volumes within the waste stream. King County will also use compost on pilot projects starting in 2020 through 2025. It will baseline compost's carbon sequestration potential by 2021 and reduce contamination through ongoing educational campaigns.	2023	SWD supported further education, procurement, and use of compost in its partnership with WLRD's agriculture program, directly serving immigrant and refugee farmers on King County-leased farmland. SWD also continues to support compost procurement and use on Parks restoration projects. Interest and use of compost increases every year through these partnerships. SWD began a partnership with King County WTD and Seattle Public Utilities in 2021 to conduct an ecosystem services analysis on the use of compost and diversion of organics from the landfill. It is the goal to use these findings to further interest and demand in the purchase/use of compost. Regional processing capacity has increased due to updates in permitting. SWD and WTD have partnered to explore the potential of codigestion to increase regional processing capacity of organics. King County has a universal contract for the direct purchase of compost that is available for use by all County agencies and local jurisdictions. This contract uses a specification that was spearheaded by the CompostWise program managed by the SWD team.
	For all the priority materials, as material generation grows with population, and more resources will be diverted from the landfill, the region will need additional permitted processing capacity to meet the future tonnage of recycling. King County will continually research and support the infrastructure investments and policies necessary to increase the processing of and the manufacturing with recycled materials.	2025	King County SWD CompostWise program provided trainings and application instructions for farmers to apply to the WSDA Compost Reimbursement Program launched in 2024. SWD in partnership with City of Seattle Public Utilities and King County WTD presented the findings from the ecosystem services analysis on the use of compost to statewide partners at the WORC/Tilth Alliance annual conference and King County's Organics Summit. In 2025, CompostWise will expand its end market use technical assistance, training, and education resources to industry experts that utilize compost in their area of work and on behalf of King County projects (landscape architects, contractors, professional associations, stormwater management, etc.). SWD will work to sign a new universal compost agreement through 2028, with room to extend through 2030. Pending USDA Federal Grant status, King County SWD CompostWise will work with partners to launch compost demonstration trials and provide technical assistance and develop resources to improve procurement/use of compost by local farmers.
GHG 5.08.01	Specifying low-embodied carbon building materials in King County capital projects. The mining, manufacturing and transportation of building materials result in significant GHG emissions. To reduce these "embodied" emissions, King County will develop requirements and specifications for the use of low emission alternatives for concrete, asphalt, wood, and steel by County project managers and designers in bid solicitations. By 2022, the County shall create standard specifications for concrete and begin requesting environmental product declarations (EPDs) for this material in construction bids. By 2023, it will require the use of EPDs for concrete and, by 2024, require a maximum global warming potential for concrete products, which it will enforce for all construction projects starting in 2025. The	2023	WTD led a pilot of the Embodied Carbon in Construction Calculator (EC3) tool in 2020 and 2021. This tool is a database of Environmental Product Declarations for building materials, including concrete. King County and K4C staff received training in using EC3 in 2021. SWD and WTD both have projects that are incorporating low embodied carbon concrete in their specifications. WTD is currently building out model technical specifications for low embodied carbon concrete and will develop a training for project managers that it will offer to WTD employees. This work will then be shared with the rest of the county's agencies to support a countywide rollout. WTD staff is also coordinating with other jurisdictions to align our strategy and specifications to their efforts.
	Embodied Carbon in Construction Calculator (EC3) tool will be used to help choose the lowest embodied carbon materials per project that meets the specification. Based on lessons learned, the County will expand these specifications to other high embodied emissions materials including asphalt, wood, and steel.	2025	DNRP-WTDcompleted model technical specifications for low embodied carbon concrete in 2023 and began integrating them into projects in 2024. In 2024, GreenTools hired a consultant to provide an Embodied Carbon 101 training to members of the Green Building Team that occurred in October 2024. In late 2024 and in 2025, the consultant is leading review of technical specifications for each of the nine capital programs and providing recommendations based on their current concrete specifications. The plan is to continue this work through 2025 and beyond with new requirements in 2025 SCAP as well as funded by the US EPA CPRG Grant to focus on expanding current embodied carbon work internally and externally.

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GHG 5.09.01	EV batteries responsible sourcing and end of life management. Encouraging recycling and responsible sourcing are key strategies to promote environmental stewardship and respect of human rights in the supply chain of primary materials for EV batteries, including lithium and cobalt. Metro Transit will lead an effort to evaluate opportunities and develop recommendations for how King County can use its fleet purchasing power to ethically and sustainably recycle and source primary components of EV batteries, including lithium and cobalt.	2023	A battery recycling contract for handling Metro's used hybrid and BEBs batteries has been submitted to Procurement. The contract language includes a request for material disposition information, so that the fate of Transit's batteries can be known. Work is also progressing on BEB fleet procurement contracts, some of which explicitly require original equipment manufacturers (OEMs) to deal with old and/or faulty batteries under the terms of warranty agreements. In 2023, the Washington Legislature passed a bill directing the WA Ecology to complete a preliminary report by November 2023 and final by April 2024 recommendations for the collection and management of EV batteries. King County supported this legislation during session.
		2025	Metro set up a five-year high-voltage battery recycling contract to ensure the proper disposal of hybrid and EV batteries once they reach the end of their useful life. More than 45,000 pounds of batteries from the Metro fleet were recycled in 2024. The Washington Legislature-adopted SB 5045, which outlines Washington's efforts to implement an EV battery recycling program, was reviewed and commented on. Work is also progressing on BEB fleet procurement contracts, some of which explicitly require original equipment manufacturers (OEMs) to deal with old and/or faulty batteries under the terms of warranty agreements. Current warranty requirements on the active bus procurement contract requires the bus builder to replace batteries during the six year warranty period. By 2025, Metro expects to have a plan in place for the repurposing and/or recycling of the surplus ESSs generated by the trolley bus battery capacity upgrade project. Metro Transit Facilities is working with The Ohio State University on a battery swapping study.
GHG 6.01.01	Sustain accelerated pace of acquisitions realized in 2019 to meet LCI acreage targets. King County tripled the amount of open space conservation funding awarded in 2019 based on new financing tools approved through the LCI. Though funding is not available to triple investments in 2020, King County staff have submitted a high number of applications for 2020 funding (approximately 40 grant applications for 2020 funding compared to 37 submitted in 2019), and are seeking other creative funding sources to leverage Conservation Futures Tax (CFT) dollars (e.g., Parks Levy).	2023	With the passage of Proposition 1 in 2022, the rate of collections for Conservation Futures, the primary funding source for the LCI will double in 2023. New legislative tools enacted in 2023 are aimed at reducing administrative barriers and addressing partner concerns that have restricted conservation efforts to date. These new tools are expected to begin producing results as early as 2025.
		2025	The King County LCI is sustaining the pace of funding at five times the level compared with 2020. This includes the lift to Conservation Futures, new financing tools, and policy changes to reduce applicant barriers. No additional acceleration is needed.
GHG 6.01.02	Increase rate of Public Benefit Rating System/Current Use Taxation enrollments and focus on LCI properties that are not on the near-term acquisition list. Continue to support King County's Public Benefit Rating System/Current Use Taxation program and increase direct program marketing to owners of LCI priority properties that are not on the near-term acquisition list.	2023	Although Public Benefit Rating System staff typically focus on unsolicited applications submitted by landowners, they have begun marketing efforts to increase enrollments as part of LCI goal to maintain and increase private open space, forests, and farmland being protected under current use taxation. Staff intend to, in part, target opportunities for enrollment of lands located in underserved and under-represented communities.
		2025	King County Public Benefit Rating System enrollments have declined by approximately 50 percent since 2020. WLRD is focusing outreach to owners of LCI properties which will be conducted in Q2 2025 and general outreach to encourage additional applications will be conducted in Q3 2025.
GHG 6.01.03	Implement Open Space Equity Cabinet recommendations to reduce green space inequities and provide increased farmland access. In 2019 and 2020, King County DNRP implemented the first phases of the Open Space Equity Cabinet's community engagement action plan, hiring the CBO Environmental Coalition of South Seattle (ECOSS) to develop and implement a pilot framework and approach in White Center (an unincorporated urban area) and the City of Burien. The goal is that, through broader engagement and education about available funding sources, the number of community-driven, match-waiver-eligible applications for King County grants will increase. As this new approach	2023	The match waiver program is very successful, and all opportunity area targets have been met to date. The pilot with ECOSS was completed in 2020, the outreach framework was implemented, and the pool of new applicants continues to grow. In 2023, the LCI team worked closely with legal counsel and leadership to expand the pool of CBOs eligible to compete for Conservation Futures funding. With an eye beyond distributional equity of acquisitions, the Cabinet continues to work on recommendations related to access, use, and open space quality.
		2025	The King County Open Space Equity Cabinet will help support additional efforts to maximize anti-displacement work in the context of open space before pivoting to a new set of policy recommendations.

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	is tested, King County hopes to expand support for similar engagement in other cities and unincorporated urban areas working to improve green space equity.		
GHG 6.01.04	Restore CFT to effective rate closer to 6.25 cents that was approved in 1982. Due to limits on property tax collection over time, the current tax rate is now just above 3 cents per \$1,000 AV, a rate that will continue to decline over time. State initiative limits the rate at which total collections from a property tax levy may increase from year to year by 1 percent (plus the value of new construction), an amount that does not keep pace with the housing market.	2023	With the passage of Proposition 1 in 2022, the Conservation Futures rate was restored to the state authorized 6.25 cents that had been approved by King County voters in 1982. State initiative limits the rate at which total collections from a property tax levy may increase from year to year by 1 percent (plus the value of new construction), an amount that does not keep pace with the housing market. The reset Conservation Futures rate will be collected in 2023, and then again decline over time (assuming property values continue to increase by more than 1 percent per year).
	King County will explore ways to restore the CFT effective rate closer to 6.25 cents, which could be achieved through different approaches, including State Legislative action or a countywide ballot measure.	2025	See 2023 update. The LCI model anticipates the potential need to lift the rate again starting in the 2030's.
GHG 6.02.01	Continue to support strategies identified in the Local Food Initiative. King County and partners will continue to implement strategies developed to achieve goals outlined in the Local Food Initiative.	2023	King County continues to implement the Local Food Initiative. Additionally, the Local Food Initiative plan and approach will be updated in 2024. Recent example accomplishments include: Land Access • Farmland Leasing Program (FLLP) continued to grow in 2023 with additional acreage added at County owned farms. FLLP now supports more than 50 farm businesses, over 90 percent of which are BIPOC owned. • DNRP was awarded \$2.5 million by USDA to help improve access to land, capital, and markets for underserved farmers and ranchers. • Working Farmland Partnership (WFP), the regional collaborative focused on solving barriers to farmland access and matching farmers with landowners, awarded funding through 2024. Infrastructure • South Seattle Community Food Hub project, which will provide low cost cold storage and aggregation space to farmers and hunger relief organizations, has raised \$5.5 million out of a total \$10 million cost of facility buildout. • Kent Valley Food Entrepreneurship project completed financial modeling and design work. Project is on hold due to one project partner's budget challenges. Farm and Food Business Support Services • Food Business Resource Center (FBRC) a one-stop shop for regional farm businesses and food entrepreneurs to access skills, resources, networks, and marketplace opportunities, funded though 2025. • FBRC launches new food and farm business incubator at 21 Acres in Woodinville in May 2023. • King County Food System Finance Plan completed in early 2023. Plan identifies pathways for increasing capital across food system. Currently working on implementation strategy. Food Access • KC County Farm to Food Bank program funded through 2024. Program provides funding for hunger relief organizations to buy fresh produce from local farmers. • Seattle-King County Public Health completed a Food Insecurity in King County Report in January 2023. The report assesses the magnitude of food insecurity in King County, the assistance needs of food security organizations, implementation of

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		2025	King County continues to support the development of much needed food system infrastructure that can increase the capacity of local farmers, NGOs and HROs to provide food to King County residents. King County continues to support and fund farm to foodbank program and work with partners to develop a long-term financial viability plan for the program. King County is piloting a project with Zero Waste Washington in 2025 to reduce on plastic farm waste with a focus on historically underserved farmers. King County is partnering with King Conservation District (KCD) on farm business support services including the creation of the FBRC. In 2025, DNRP will complete the redevelopment of the Farm King County website that serves as a one-stop resource for farmers. The King County Local Food Initiative team is also leading an Agricultural Sector Study to analyze opportunities to address barriers such as housing, health care, farmland access, market access, and farm economics. This report will be completed by the end of 2025.
GHG 6.02.02	Develop a multi-partner, fully-integrated program to support immigrant and refugee farmers. King County has a very diverse population, with nearly 25 percent of the County's 2.3 million residents claiming a place of birth other than the U.S. Immigrants and refugees continue to settle in King County. As of 2018, there were more than 200,000 immigrants and refugees from Southeast Asia and Africa, many of whom came from rural regions and left behind family farms. Many those individuals live in south King County. Informal conversations	2023	DNRP has expanded upon the successful foundation created by their Farmland Leasing Program, to create a more inclusive program focused on improving farmland access to traditionally underserved communities. WLRD recently received notification that they have been awarded a \$2.5 million grant from USDA to support an expansion of our farmland access work. The grant will enable King County to explore a range of land access strategies that will be developed and implemented in partnership with immigrant/refugee/BIPOC farmers and farm organizations. Funding will also support an expansion of the King County immigrant/refugee farming project on the County-owned Horseneck Farm.
	over the years indicated that a significant number of economically challenged immigrants and refugees from Southeast Asia and Africa retained their passion for farming and were interested in creating a farming business or growing food for their families. A 2019 DNRP report identified a suite of challenges and recommendations that were identified though an immigrant/refugee farmer outreach effort and is now working with farmers and community leaders to develop and implement a strategic plan focused on the highest priority recommendations.	2025	King County reorganized the agriculture team to create a program focused on farmland access and hired a program manager. Over 90 percent of farm tenants on King County owned farmland are BIPOC farmers and virtually all farmable land on King County owned farms is fully allocated. Significant improvements in farm infrastructure have been completed to better support farm business development. King County continues to be a leader in a multi-partner Working Farmland Partnership to support farmland access efforts. A new farm has been added to the King County farmland portfolio and farmland will be made available via an RFP in Q4, with the first farmers on-site in 2026. The Conservation Futures Grant continues growing capacity of partnership with CBO through the farm leasing program. Since 2023,
GHG 6.02.03	Launch the Rural Forest Carbon Program and include options for both County-owned and private forestland.	2023	six awards have been aimed at expanding farm access for historically underserved communities. Two additional projects are competing for 2026 funding. King County worked with a consultant and a supportive forest landowner (also a member of the Rural Forest Commission) to develop and refine documents and protocols needed to including private forestland in the County's forest carbon program. Due to the complexity and issues related to sharing risk and revenue, along with the emergence of other options developed by the private sector that are designed for smaller private landowners, King County decided not to pursue a County-sponsored private forest carbon program. We will continue to work with forest landowners to develop and implement forest stewardship plans that increase potential for carbon sequestration and will connect landowners with third-party carbon program developers.
		2025	All available carbon credits from past issuances of the King County Carbon Program will be sold by end of Q2 2025. Total revenue from carbon credit sales has exceeded \$1 million, with revenue used for additional forest acquisition. Round three carbon credit verification will be completed, and credits will be issued and available for sale beginning Q3 of 2025. DNRP is exploring options for significant program expansion in 2026.
GHG 6.02.04	Research opportunities to take the County's forest carbon programs to scale, which includes consideration of transitioning management responsibility to another party with regional or statewide responsibilities.	2023	Paused action pending possible implementation of WA DNR's statewide program and discussions with them about options to collaborate on protecting significant, carbon rich acreage through forest carbon. Adding a private lands component is not feasible as there are existing third-party options that meet the needs of landowners better than the County's program; efforts are focused on educating landowners about options.

Action #	2020 SCAP Priority Action	Status	Additional Information
		2025	King County began serious examination of options to greatly expand forest carbon program in Q1 of 2025. King County initiated conversations with owners of larger blocks of potentially suitable forest to assess willingness to sell or collaborate and conversations will continue through Q3. Tribal consultation was initiated in Q1 and will continue through Q4. King Count plans to identify suitable properties by end of 2025 and to conduct feasibility analysis and appraisals in 2026.
GHG 6.02.05	Explore compost benefits. King County will support farmers on King County-owned farmland in the application of compost to their lands in order to improve their soils and to demonstrate compost's value. This program will establish compost environmental benefits on farmlands, encourage land stewardship, and offer information and training to these farmers. Additionally, the County will support research into the climate benefit of compost to help provide clear evidence of climate impacts of using compost on King County lands, including agriculture and seeks to better understand the carbon sequestration potential of compost.	2023	Secured grant funding from WA Conservation Commission to purchase a mid-size compost spreader. King County DNRP Divisions SWD and WLRD are collaborating to support a compost program on County-owned Horseneck Farm to demonstrate use of the spreader and apply compost broadly; educating farmers about application and benefits of compost. Full-cycle assessment of compost will require additional staff or consulting resources and DNRP has collaborated with a range of partners, including KCD and NGOs, to pursue grant funding to both expand the application of compost and to conduct additional research into the agronomic and climate benefits of more widespread use of compost by farmers.
		2025	King County continues education and technical support to encourage greater use of compost by farmers on King County owned farmland. King County increased volume of compost and spreading services to farmers on King County farms. As experience grows, demand is increasing. King County partnered with US Composting Council and received USDA funding to support a western US compost study with research plots and agronomic plots to be established in King County. However, the federal grant has been placed on hold.
GHG 6.02.06	Amend farm plan and forest plan public rules to require inclusion of strategies that can reduce emissions, increase carbon sequestration, and make lands more resilient in the face of climate change.	2023	Amendment to public rules put on hold due to DLS capacity limitations. The desired outcome, which is to encourage landowners to adopt more carbon-friendly, climate resilient practices can be achieved through other pathways. King County and KCD require that the WA DNR forest stewardship plan template be adopted and is required for all plans approved by King County; the template requires addressing climate and carbon actions. Transitioning from traditional farm management plans, which focus on water quality, to more comprehensive farm stewardship planning will require KCD collaboration. Talks are underway about how to expand on current farm stewardship plan requirements.
		2025	The Farm Plan Public Rule update is timed to coincide with adoption of Critical Areas Ordinance update Q3 2025. King County partner and Tribal outreach for the draft update to the Farm Plan Public Rule is scheduled for Q3 and Q4 of 2025. Plan revisions are expected to be approved and adopted in 2026. No action is planned for the Forest Stewardship Plan Public Rule in 2025.
GHG 6.02.07	Streamline multi-jurisdictional processes. Where possible and appropriate, coordinate and streamline forestry and agricultural support services between King County, state and federal agencies, universities, and the KCD.	2023	King County is continuing to look for opportunities for process improvement. Examples include adoption of revised Washington Department of Natural Resources forest stewardship plan template, close collaboration with KCD to allocate private forest stewardship planning responsibilities, and partnering with KCD and Natural Resources Conservation Science (NRCS) to maximize opportunities for farm owners to access water quality improvement cost share funding.
		2025	King County forestry staff supported information and technical services exchange at the multi-agency West Side Rural Forestry Forum and Wildfire Mitigation Working Group. King County continues to work closely with KCD and WSU Forestry Extension to provide expanded forest stewardship technical training and education for private forest landowners. King County works closely with King County Rural Forest Commission to provide recommendations to the King County Executive and King County Council about issues of importance to landowners and forestry partners.
GHG 6.03.01	Complete Forest Stewardship Plans: Maintain progress toward completing plans to inform restoration priorities and activities on King County-owned property.	2023	King County has clarified and streamlined development process for Forest Stewardship Plans. Currently six are complete, 20 in draft form, six are needed. Recent expansion of DNRP (Parks Division) forest team will enhance capacity for stewardship plan development and implementation.
		2025	Since 2015 when this goal was developed, King County has developed a more sophisticated understanding of King County's forested inventory and restoration priorities. Rather than prepare FSPs for all properties greater than 200 acres (an arbitrary proxy), King County is committed to developing plans for properties prioritized for near-term restoration (including parks smaller than 200 acres). By the end of 2025, 23 parks greater than 200 acres will have forest stewardship plans by the end of 2025 — seven plans are final, 14 are complete and are in the late stages of review, two are in-progress. Six parks with fewer than 200 acres that have high-priority conditions will also have forest stewardship plans by the end of 2025.

Action #	2020 SCAP Priority Action	Status	Additional Information
			Eight parks greater than 200 acres have been de-prioritized for development of Forest Stewardship Plans due to favorable conditions, lack of access or operational infeasibility.
GHG 6.03.02	Complete comprehensive farmland stewardship plans for all County-owned farmland. Ensure that plans include regenerative agriculture practices and address climate change. DNRP will complete a literature review of the full-cycle	2023	WLRD is developing a template for comprehensive farmland stewardship plans. Development of plans will require additional staff capacity or funding for consultant support. Consideration of compost implications and pilot moved to GHG 6.02.05.
	GHG impacts from the use of compost on agricultural lands and, assuming a positive outcome of the review, will launch at least one pilot project to apply compost on County-owned farmland.	2025	King County coordinated with KCD to develop a framework for comprehensive farm stewardship plans. King County issued an RFP and selected a contractor for plan template development and drafting initial three plans for county owned farms. The initial three comprehensive farm stewardship plans will be completed by end of Q2 2025.
GHG 6.04.01 Double the pace of forest restoration. Since 2015, King County has initiated forest stewardship projects on nearly 100 acres per year. However, with a better understanding of forest conditions across the Parks' inventory, King County recognizes the need to accelerate this pace. Restoration will prioritize County-owned forestlands most in need of ecological treatment per 2020 analysis, and align with appropriate Forest Stewardship Plans. Activities could include removing invasive species, young stand management, and afforestation. King County's objective is to place these additional acres on a climate-ready trajectory, on a path toward late seral, mature forested conditions that can better absorb and adapt to disturbances like changing temperatures, attacks by pests, and diseases.	2023	Parks increased new acres treated from recent average 74 acres to 201 acres in 2022, and is on track to increase acreage. For additional information see performance measure GHG 35.	
	County-owned forestlands most in need of ecological treatment per 2020 analysis, and align with appropriate Forest Stewardship Plans. Activities could include removing invasive species, young stand management, and afforestation. King County's objective is to place these additional acres on a climate-ready trajectory, on a path toward late seral, mature forested conditions that can better absorb and adapt to disturbances like changing	2025	New forest restoration has increased 69 percent compared to pre-2021 rates, averaging 126 acres per year and increasing. Long-term maintenance of previous projects has also increased. King County hired four new FTEs to support forestry projects since 2023 and is establishing contracts with private contractors to supply forestry support work as well. By December 2025, Parks will install more than 200 acres of new forest restoration projects per year.
GHG 6.04.02	Green job opportunities or pipeline. As King County shifts from a forest stewardship planning goal for lands it owns to one that identifies a target for on-the-ground forest restoration, green jobs could be sustained or created.	2023	Parks has established successful Youth Conservation Corps. Parks has also convened and managed Jobs & Housing (Covid recovery) crews with ecological restoration as part of work program.
	Forest restoration work will be considered as part of the broader Equitable Green Jobs Strategy King County is currently developing. In 2020, Parks will also launch a youth conservation corps, which will begin to build capacity and awareness among teens, a green jobs priority. This benefit could be increased if King County can further support and galvanize restoration work on lands beyond county ownership.	2025	Parks has continued and grown the Youth Conservation Corps, a popular paid summer internship program for teens interested in jobs in parks and the environment. Similarly, Parks continues the Jobs & Housing (Parks Beautification) crew, incorporating ecological restoration into its work. Projects follow a structured cycle of site prep, noxious weed control, tree planting, mulching, watering, and monitoring. Recent highlights include planting 1,200 native trees and shrubs in partnership with Connected Where We Work and a work volunteer event that added 400 shrubs. For the rest of 2025, a few small plantings are planned, with several large events set for fall.
GHG 6.05.01	Pilot projects and early actions. By the end of 2020, King County will develop a 30-Year Forest Plan, or vision, to align and amplify the County's and partners' work to maximize forest health and tree cover in both urban and rural King County (see call out in SCAP document). King County aims to implement pilot projects and other early actions supported by partners.	2023	The <u>30-Year Forest Plan</u> was completed in early 2021 and priority actions are being implemented. Work has been completed on two of the six identified pilot projects, work is in progress on three, (climate-adaptive planting trial, forest health assessment, demonstration forest), and one was paused after the initial stages were complete when it was determined that it would not work for a county project.
		2025	Work has been completed on four of the six pilot projects identified in the 30-year Forest Plan. One is in progress and one was paused after it was determined that it would not work as a County project.

Table 2. 2020 Sustainable and Resilient Frontline Communities Priority Action Status

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 1.01.01	Provide and support community organizations and climate justice leaders with tools, materials, compensation, professional development, and technical assistance to effectively engage and share their expertise with King County and other jurisdictions in climate action, policy, and advocacy across sectors. Key Departments/Programs: Climate Action Team Related Departments/Programs: Metro, OERSJ, Public Health, DNRP	2023	King County benefits greatly by learning from and equipping CBOs with the tools and structures needed expand its climate work. We are advancing this priority through supporting monthly CECTF meetings that provide a mechanism for community leaders to collaborate with the County and other jurisdictions on climate initiatives. To date, the CECTCF has provided input and leadership on the Climate Equity Capital Pool projects, co-developed the 2023 Climate Justice Learning Series, provided key input on SRFC performance measures, Green Building Team grant development, the King County 2024 Comprehensive Plan Update, and on recruitment of youth members to the CECTF, among other climate-related projects. DNRP programs like RainWise and the WaterWorks Grant Program fund rebate programs, contracts, and grants that address water quality with frontline communities, businesses, and organizations with a goal toward environmental resilience. DNRP's CBO Partnership Program is co-creating a long-term partnership model to address water quality needs.
		2025	DNRP's Re+ Community Panel consulted on SWD grants, its legislative agenda, and the 2025 SCAP update. This panel will remain engaged in policy development, grant program selection, and Re+ fast start action implementation. A Climate Equity Working Group (including the CECTF and additional community members) identified priority actions and conducted an equity screening for the 2025 SCAP topic areas. Eight to 10 new community members will join the CECTF, including up to four new youth members to continue engaging on climate initiatives.
SRFC 1.02.01	Document the CECTF policy development framework and develop King County capacity for authentic and collaborative community-driven climate policy development processes. Key Departments/Programs: Climate Action Team Related Departments/Programs: Metro, OERSJ, Public Health, DNRP	2023	CECTF is a group of community leaders who represent frontline communities and co-create equitable climate solutions for King County. The CECTF Policy Development Framework was completed in 2021, and provides a history and roadmap of the values, strategies, and considerations that led to establishing a community work group dedicated to advancing climate justice initiatives and priorities at King County.
		2025	The CECTF policy development framework was completed in 2021, and the resulting tool was used for ongoing project input. For the 2025 SCAP development, a Climate Equity Working Group (CEWG) supported equitable 2025 SCAP update development. The CECTF will continue consulting on climate initiatives, connecting with other community consultants, and sharing their expertise with County staff.
SRFC 1.02.02	Develop a framework in partnership with frontline communities for continued collaboration with and leadership of the CECTF in implementing community-driven climate policy and programs, such as developing qualitative and quantitative measures for climate justice. Key Departments/Programs: Climate Action Team Related Departments/Programs: Metro, OERSJ, Public Health, DNRP, DCHS	2023	To sustain long-term community partnerships via the CECTF and other groups, identifying equity needs and mutually beneficial goals between King County and community is essential. The CECTF delineated a process for County staff to engage them as partners on climate work in 2022. Goals they identified include (1) advancing SRFC implementation, (2) reducing the burden on the CECTF for educating staff on sharing power and space with community, (3) centering climate justice and frontline communities, and 4) establishing relational and responsive collaborations. The King County-CECTF partnership form is a model for sharing power with frontline communities used by any County staff interested in partnering with the CECTF.
		2025	Using the <u>Climate Equity Community Task Force</u> 's (CECTF) framework for partnering with King County, the CECTF provided input on a total of 11 climate-focused projects across ECO, DNRP, Metro, and PHSKC. The projects included the Metro Green Jobs Strategy, The Parks Levy, and the PHSKC climate health equity data dashboard.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 1.03.01	Build, cultivate, and support authentic relationships with frontline community members and organizations by collaborating on projects, providing resources, using positional power to help organizations achieve their missions, participating in community events, and hosting community events and listening sessions. Key Departments/Programs: Climate Action Team, Dept. ESJ Teams Related Departments/Programs: Metro, OERSJ, Public Health, DNRP, DCHS, DLS	2023	2023 Biennial Report: The SRFC advocates for County investments in frontline community capacity in several ways. The Community Climate Resilience Grant Program launched October 2023 to support CBOs to initiate or to expand their capacity by providing \$5,000, \$15,000, or \$30,000 grants to address climate priorities in their communities. ECO also provides \$15,000 annually in sponsorships for frontline community events and trainings, and routinely partners on training and presentation opportunities. Additionally, DNRP capital programs are cultivating a positive presence across project sites through partnering on inclusive materials and facility design input where feasible. DNRP is also building a CBO Partnership Program co-creation model to develop long-term community partnerships to guide how community needs are met with a cohort of CBOs representing frontline communities and staff as key stakeholders.
		2025	In 2024, grants totaling \$150,000 were awarded to CBOs as part of the Community Climate Resilience Grant program. Awarded projects focused on community capacity development, food systems and food security, community health and emergency preparedness, and transportation equity. In 2024, \$15,500 were distributed in sponsorships to the following frontline CBOs: Environmental Professionals of Color Seattle Chapter, UTOPIA, Solar Punk Fest, Pueblos Originarios, ECOSS, and Alimentado al Pueblo.
SRFC 1.03.02	Build King County capacity to engage with frontline communities in ways that acknowledge inherent power dynamics, privilege, and historic harm to create foundational long-term partnerships by preparing staff with knowledge, awareness, ground rules, tools, background in environmental/climate justice, and equity trainings in alignment with the goals of the Equity and Social Justice Strategic Plan. Key Departments/Programs: Climate Action Team, Dept. ESJ Teams, OERSJ Related Departments/Programs: Executive Office, DNRP, Metro, DCHS, DLS, OERSJ, Public Health	2023	King County has been cultivating its capacity to engage with frontline communities, shifting from community involvement to collaboration, as described by the Movement Strategy Center's The Spectrum of Community Engagement. The County is committed to compensating frontline communities for their lived experience and community expertise when eliciting their consultation on climate efforts and on County work more broadly. The complex process of community involvement and collaboration is exemplified by the Equitable Development Initiative (EDI) Community Planning Workgroup (DCHS), the Metro Mobility Equity Cabinet (Metro), the Open Space Equity Cabinet (DNRP), the CBO Partnership Program being developed using a co-creation model with community representatives and staff in monthly workshops to address water quality (DNRP), and the CECTF. These groups are compensated and tasked with co-developing equitable solutions related to climate and the environment, among other issues, providing guidance on engagement and investment priorities in partnership with staff and leadership. The PSB-led 2024 King County Comprehensive Plan Update Equity Work Group represents one of the county's newest collaborations. Additionally, the 2023-2024 Climate Justice Learning Series, co-developed with the CECTF, is open to the public and County staff to build shared climate justice literacy.
		2025	The Metro Mobility Equity Cabinet, the DNRP Open Space Equity Cabinet, and ECO CECTF have undergone recruitment efforts since Oct. 2023 and continue to partner on County action. The Comprehensive Plan Update Equity Working Group sunset after the successful adoption of the updated 2024 plan. In 2025, DCHS will be recruiting an interim EDI Advisory Board to guide funding for community-driven development. The CECTF is recruiting new members and will continue to engage in the development of the 2025 Climate Justice Learning Series.
SRFC 1.04.01	Elevate youth voices by working with young leaders around climate action, creating opportunities for youth leadership in decision-making spaces, and partnering with youth development programs. Key Departments/Programs: Climate Action Team Related Departments/Programs: Metro, DNRP, DCHS	2023	As of 2022, several targeted Climate Equity/Green Jobs initiatives have been established and resourced to enable the participation and leadership of youth representing frontline communities. To date, the NextGen Internship program has provided a one-year opportunity for six interns (three interns per year) to work alongside SCAP section leads to develop experience, skills, and networks in policy, program, and planning decision-making spaces related to climate change at King County. As of 2022, five high school youth have joined CECTF, developing skills and applying their leadership in reviewing and amending hiring processes for the DNRP Youth Conservation Corps, providing Climate Justice 101 workshops for Metro and DNRP youth summer programs, and participating as speakers for Climate Justice Learning Series workshops as well as participating in the Equity Work Group for the 2024 King County Comprehensive Plan Update. DNRP's WTD Clean Water Ambassadors is a paid cohort teen internship focused on local environmental clean water issues, solutions, and careers. Interns create and implement a teaching plan for clean water topics for their communities and schools.

Action #	2020 SCAP Priority Action Description	Status	2023
		2025	In October 2024, King County hosted a 2025 SCAP update feedback session for youth on youth-focused priority climate actions for the 2025 SCAP. In 2025, At least three youth will be onboarded to the CECTF for a cohort of a minimum of five youth. King County will foster relationships with other youth-focused councils/workgroups, such as the Puget Sound Educational Service District Youth Wisdom Council, for the CECTF youth members to build relationships with and collaborate on implementation of youth-focused climate actions.
SRFC 2.01.01	Grow leadership capacity in frontline communities by co-creating inclusive climate resources, building a shared climate literacy, supporting leadership development opportunities and trainings, and reducing barriers to participation for frontline communities to engage in and influence King County's climate and environmental work. Key Departments/Programs: Climate Action Team Related Departments/Programs: DNRP, Metro, Public Health, DSHS, DLS	2023	King County is addressing this critical element in several ways while acknowledging the road to capacity-building is long, complex, and ongoing. Projects demonstrating this approach include the development and launch of the 2023-2024 Climate Justice Learning Series, a two-year, six-workshop per year, public workshop series co-developed by CECTF, led by, and intended for frontline communities as the priority audience, and County staff as the secondary audience. Public Health – Seattle & King County (PHSKC) has developed award-winning climate and health messaging with and for community through transcreated comics, fliers, web materials, its Box Fan Filter program, and its Community Clean Air Ambassadors program. Frontline community leadership in climate is supported through groups like the CECTF, the Clean Air Ambassadors (PHSKC), and the 2024 Comprehensive Plan Update Equity Work Group.
		2025	Since 2023, 169 community members attended one or more <u>Climate Justice Learning Series</u> (CJLS) Workshops, across ten climate justice topics. PHSKC co-created new risk communications on seasonal hazards (heat, wildfire smoke, flooding) with community navigators. Messages were distributed through community media from 2023 to 2025. PHSKC is also producing an air quality video series for County residents, CBOs, homeowners, landlords, and building operators. In 2025, seven CJLS workshops will be presented to community on five topics relating to climate justice. One in-person workshop in collaboration with PHSKC will be offered on the topic of Climate Storytelling & Reclaiming Community Data for the department's Community Health Advocates teams.
SRFC 2.02.01	Strengthen King County climate justice efforts by aligning related work across departments, increasing staff capacity to address climate inequity and build authentic community and Tribal partnerships, addressing access barriers to sustainability-related programs, and providing guidance on addressing climate inequities. Key Departments/Programs: Climate Action Team, OERSJ Related Departments/Programs: Metro, DNRP, Public Health, DLS, DES-OEM, DCHS	2023	Numerous interdepartmental and inter-agency groups convened by King County meet regularly to address climate resilience, climate health equity, and climate equity. These include the Puget Sound Climate Preparedness Collaborative (PSCPC), the Climate Health Action Team (CHAT), and the SRFC Advisory Team. The PSCPC focuses on alignment of regional resilience efforts for natural and built environments and are currently seeking funding for member training on climate justice, and to develop tailored performance measures for resilience of people and the environment. CHAT addresses climate-related health impacts at state and local levels, centering frontline communities in its interventions. The SRFC Advisory Team, comprised of County staff across departments, provides updates on climate equity initiatives and engages member input on programmatic decisions. Efforts to align and increase capacity include the incorporation of climate equity priorities into the ESJ Strategic Plan Refresh, the 2023 Determinants of Equity and Data Tool, and the 2024 King County Comprehensive Plan Update. Monthly Climate Action Talks for King County staff that began in July 2023 are broadly sharing the principles and application of climate equity and climate justice. Notably, engaging frontline community members in these efforts has proven challenging for various reasons, namely that community capacity is constrained, and thus individual programs must find ways to align and engage through culturally relevant and community-centered strategies.
		2025	In fall 2025, ECO is piloting staff training on climate equity and climate justice across departments. In 2024, ECO worked across DES, DLS, DNRP, Metro, Office of Economic Opportunity and Creative Economy (OEOCE), PHSKC, and PSB to establish draft 2025 SCAP actions advancing community priorities. ECO created a 2025 SCAP Equity Resource outlining key climate equity principles and strategies, and a listing of emerging community priorities for climate action. Beyond King County, ECO consulted on the CECTF/SRFC community-driven model for the following: • New York State Energy and Research Authority (NYSERDA) on development of the Energy Equity Collaborative. • Climate Advocates Toolkit for the Climate Action Campaign based in San Diego, CA. • City of Vancouver Sustainability Group "Community Accountability in Climate Action" research report. • Report "Enabling factors and constraints for advancing justice through climate adaptation: Evidence from 25 US municipalities implementing climate plans." for Virginia Tech.

Action #	2020 SCAP Priority Action Description	Status	2023
			 Partnering with new UW Climate Justice course to use SRFC as basis for student final research projects in 2023, 2024, and 2025.
SRFC 2.03.01	Co-design and implement culturally relevant communication and education strategies that best inform frontline communities about climate change and intersecting climate justice issue areas, including co-creating tailored materials with frontline communities that are culturally relevant and in accessible languages. Key Departments/Programs: Climate Action Team Related Departments/Programs: Public Health, DES-OEM, DNRP, DCHS, Metro	2023	King County is responding to climate-related impacts on frontline communities through the development of culturally relevant communication and education. The 2023-2024 Climate Justice Learning Series is co-developed with CECTF to engage the public and County staff on climate justice issues, including introductory concepts, policymaking and advocacy skill-building, and community storytelling for data. In 2022, PHSKC distributed more than 50,000 co-created multi-language comics on managing heat and climate change impacts via local CBOs serving frontline communities. In the summers of 2022 and 2023, they led a "Stay Safe in the Heat" media campaign in 10-12 local community and multilingual outlets, to share how people can stay safe and who is most at risk. DNRP's RainWise Program, WaterWorks Grant and its WTD Adult Education program partner with CBOs to provide free tours and educational resources to frontline communities. These are great strides, yet more investments and capacity are needed to co-create and broadly distribute in-language media and materials on climate justice and climate impacts generally.
		2025	In 2024, a King County Renter and Utility Affordability Survey led by ECO was translated into eight languages. Spanish language interpretation and translation were provided for 2025 SCAP update participants and for all Climate Justice Learning Series workshops. PHSKC developed a multi-media interactive educational resource called "Breathe Better at Home" (BBAH) co-designed with community and translated into 13 languages. BBAH is available in print and electronic formats and helps prepare residents for wildfire smoke events. Under efforts supported by the WA Climate Commitment Act, PHSKC developed a video education series in multiple languages on the importance of air quality, air quality and climate change, and actionable measures residents can take to improve their indoor air quality.
SRFC 2.04.01	Intentionally partner with youth-serving organizations and educational institutions across King County to make climate change and climate justice education more accessible, especially in frontline communities. Key Departments/Programs: Climate Action Team Related Departments/Programs: Public Health, DES-OEM, DNRP, DCHS, DLS, Metro	2023	Through inclusion of five high school youth to CECTF, efforts to increase youth leadership within King County climate decision-making spaces have been successful. In 2022 and 2023, the Climate Team briefly partnered with Sustainability Ambassadors to present and develop a climate justice curriculum for their Climate Action Teacher Fellows program working with high school educators in King, Snohomish, and Pierce Counties. Additionally, multiple summer youth programs hosted by King County (Youth Conservation Corps, Clean Water Ambassadors, and Metro's Transit Equity Internship) focus on climate justice education and empowering youth to be leaders in building solutions. New and ongoing programs like King County Green Schools, DNRP's Youth Water Quality Education Program, and Metro's new Transit Education curriculum touch on climate justice and are available to partner with school classrooms across King County. The Climate Team is working toward developing an intentional and sustainable strategy for partnering with the King County Green Schools program and Title I high schools in King County in 2024 to advance climate youth leadership and climate curriculum development.
		2025	In the 2024-2025 school year (as of mid-March 2025), Metro's Classroom Transit Education Program has reached more than 1,000 students in classrooms. 341 of these students received workshops with a direct focus on climate change and sustainability. In spring 2025, the CECTF will include a youth cohort representative of a broader County geography. Metro's Youth Transit Equity Internship will return in summer 2025.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 3.01.01	Partner with frontline communities organizations, educational, CECTF, labor institutions, youth programs, environmental justice and climate equity organizations, businesses, facility managers, utilities, Tribes, local governments, climate scientists, K4C, and the PSRC to develop a green jobs strategy that evaluates and establishes pathways to bring frontline communities, particularly BIPOC, into living-wage green jobs. Key Departments/Programs: Climate Action Team, Executive Office Related Departments/Programs: Metro, Public Health, DLS, DES, OERSJ, Department of Human Relations (DHR), DNRP	2023	In 2022, King County commissioned an analysis of high-demand sectors related to the Green Economy through 2031. This analysis shaped the critical sectors of focus for the Green Jobs Strategy: construction, transportation, manufacturing, and professional services. See the King County Industry Sector Analysis report . A Green Jobs Interdepartmental team (IDT) came together September 2021 through December 2022 to identify and develop onramp pathways for County careers in King County agencies. The IDT also reviewed strategies for the Green Jobs Strategy, published in February 2023. This group was disbanded in 2023 and is being reformulated as the Green Jobs Task Force in 2024. The Green Jobs Program is also establishing the Climate Careers Coalition (C3) in 2024. Partners will include educational institutions, CECTF, labor institutions, youth programs, environmental and climate justice organizations, businesses, facility managers, utilities, Tribes, local governments. The Coalition will provide policy guidance, fund public-private workforce partnerships, promote green career opportunities, and foster cross-community collaboration.
		2025	The <u>Coalition for Climate Careers</u> (C3), a countywide cross-sector collaboration, appointed an executive steering committee and is welcoming additional entities and community organizations to join the coalition. In response to insights from the industry sector analysis, King County is expanding its adding more than 25 new businesses to the <u>JumpStart</u> contractor network. This includes businesses specializing in HVAC, solar, electrical, and energy efficiency fields. Businesses in the network provide paid work-based learning opportunities for young people and participate in workshops and events aimed at showcasing the green economy fostered by King County. The Green Jobs strategy was published in 2023 and is being implemented. King County is now revising it to scale best practices by creating the 2025 Climate and Workforce Strategy, with support from county staff and community partners.
SRFC 3.02.01	Develop an equitable green workforce that is representative of the diversity of King County communities and reflects the diverse skill sets, knowledge systems, and experiences of King County communities through targeted hiring, workforce development, community agreements, and creating intentional pathways for frontline communities across sectors and seniority levels. Key Departments/Programs: Climate Action Team, OERSJ, Executive Office, DNRP, Metro Related Departments/Programs: DLS, DES, DHR	2023	In 2022, the Green Jobs Team piloted the NextGen Climate Internship program, dedicated to expanding climate career pathways to underrepresented college students. NextGen welcomed its second cohort of three interns in February of 2023. The NextGen program is expanding by including new interns across County departments on climate-related projects. See the 2022 NextGen Climate internship annual report. As of July 2023, the Green Jobs Team will be convening King County agencies in green career pathways workgroups to leverage the pilot career pathways created in 2022 and formalize externally facing career pathways by the end of 2023. Events: As of October 2023, the Green Jobs Team has hosted eight events highlighting green industry sectors and opportunities to middle-skill workers and youth (18-24): (1) Two WeldWorks Application Clinics – August 2022 and September 2023, (2) an Energize Heat Pump Pilot Program Trainee/Contractor Luncheon – September 2022, (3) Application Clinic for Parks Mobile Engagement Team (MET) – January 2023, (4) WTD Operator-in-Training Program Information Session – February 2023, (5) Green Digital Media Marketing Program Information Session, in collaboration with Shoreline Community College – May 2023, (6) Energize Information Session, in partnership with King County YouthSource and PACT – May 2023, (7) an EV Planner Workshop Series in collaboration with Emerald Cities Collaborative – August 2023, and (8) The Green Jobs Team's centerpiece event of the year, the 'Green Jobs, Green Futures Summit' – September 2023. Cumulative attendance is estimated at more than 500 people.
		2025	In June of 2024, Metro held its first green jobs community event in Tukwila. More than 140 attended. This event used career pathways maps to talk about opportunities for frontline communities at Metro. The NextGen Climate Internship Program hosted two additional internship cohorts within the Executive Office and various county departments. View the latest annual report here (2024 NextGen Annual Report). King County continues sponsoring and hosting events supporting participation and career exposure for members of frontline communities in the green economy. These events include the Pro-Equity Contracting Event, connecting local businesses with contracting opportunities in the clean energy sector and application clinics aimed at connecting young people with job openings in county departments. Graduation ceremonies were held at the for frontline workers in Metro and DES receiving certification through the Green Janitor Education Program. Green Career Pathways continues working to formalize external pathways by the end of 2025.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 3.03.01	Partner with frontline community workers and industries to identify strategies to equitably transition workers to greener jobs, shift to more sustainable practices, and promote green skills development, while prioritizing worker health and economic well-being. Key Departments/Programs: Climate Action Team, Executive Office Related Departments/Programs: Public Health, Metro, LCI, DNRP	2023	The Green Jobs Strategy Is focused on equitable green jobs transitions and on promoting green skills development. Additionally, PHSKC has taken steps to address worker safety in a changing climate. PHSKC created guidance for field operations in wildfire smoke and extreme heat conditions and trained employees who work outdoors and their supervisors on this guidance, see Wildfire Smoke Guidelines PHSKC Field Operations & Extreme Heat Guidelines PHSKC Field Operations. PHSKC Communications has created slides with information for outdoor workers on how to stay safe in the heat in English, Spanish, Vietnamese, and Chinese for distribution to partners and on social media. PHSKC also included information about wildfire smoke in four King County 'Employee News' internal email newsletters. Lastly, PHSKC staff provided supportive comments to the Washington State Labor and Industries (L&I) Department during rulemaking on new rules and requirements for worker protections for both heat and wildfire smoke. The King County Extreme Heat Strategy will highlight these L&I updates to ensure consistency. DNRP's RainWise Program is cultivating BIPOC contractor implementation of green stormwater infrastructure through capacity building contracts with CBOs.
		2025	In 2024, King County piloted the Green Skills Development Fund to upskill its workforce to meet climate action goals. ECO worked with departments and DHR to design the fund and provide training opportunities to more than 100 employees across various trainings and certifications. The fund has connected frontline workers and county capital project managers to relevant certifications in their field, including the <u>U.S. Green Building Council's Green Janitor certification</u> , <u>Envision Sustainability Professional certification</u> , and the <u>LEED Green Associate certification</u> . The certifications and certification help County employees sharpen their sustainability and energy conservation skills to advance climate action in their roles. Lastly, King County partnered with UW consulting lab for a report on how to scale the green skills development fund to be released in 2025
SRFC 4.01.01	Create and resource opportunities for frontline communities to co-create communications around climate events and health, access emergency resources and warnings, and collaborate on training materials to prepare communities for emergency events and climate-related health impacts while reducing access and participation barriers. Key Departments/Programs: Climate Action Team, Public Health, Metro Related Departments/Programs: DES-OEM	2023	In 2023, DNRP consulted with CECTF to inform development of its Flood Management Plan engagement strategy. Informational materials have been translated into six languages, including Khmer, via partnership with the Khmer Community of Seattle King County. In October 2023, the Climate Team opened a pilot Community Climate Resilience grant totaling \$100,000 to support leaders and organizations serving frontline communities in addressing relevant climate work and communications needs. King County Emergency Management is planning a project in partnership with Mother Africa to co-create in-language emergency preparedness videos to be completed spring 2024. PHSKC is working with a cohort of Clean Air Ambassadors tackling climate and environmental issues related to indoor air quality and the health of fishing communities in proximity to the Duwamish River Superfund site. Recently, PHSKC launched an interactive online educational tool, "Breathe Better at Home," which teaches about indoor air quality. PHSKC is completing distribution of more than 3,000 box fan filter (BFF) kits to improve indoor air quality during wildfire smoke events, partnering with a cohort of CBOs through in-language outreach. PHSKC is also partnering with the University of Washington to complete an assessment of BFF kit effectiveness through 2025.Much work is being done and more is needed to ensure frontline community households can be resilient in the face of climate-related emergencies.
		2025	PHSKC Preparedness and Risk Communications teams developed a social media toolkit with messaging on how to stay safe during summer hazards including extreme heat and wildfire smoke, available in 28 languages. In 2025, the Climate Justice Learning Series will cover topics of importance to frontline communities, including extreme heat mitigation strategies.
SRFC 4.02.01	Coordinate agencies to make investments and resources available in frontline communities to prepare for, mitigate, and address disparities in climate-related public health impacts using best available data. Key Departments/Programs: Climate Action Team Related Departments/Programs: Public Health, DES-OEM, LCI, DNRP	2023	Numerous initiatives and plans are addressing climate-related health impacts that disproportionately burden frontline communities. PHSKC's Climate & Health Equity Initiative (C&HEI) kicked off in spring 2023 to be completed by spring 2024 (a shared priority with Prep 4.2.10). This strategy includes multi-agency stakeholders and seeks to baseline exposure risks and identify mitigation strategies with the understanding that income is a determinant positively associated with indoor air quality. By the end of 2023, PHSKC will complete development of a PHSKC Operational Plan for its 2018 Blueprint for Addressing Climate Change and Health.

Action #	2020 SCAP Priority Action Description	Status	2023
		2025	PHSKC completed shared SCAP action Prep 4.2.10 in Spring 2025 releasing a wildfire smoke health impacts mitigation strategy. The strategy provides a comprehensive assessment of the health risks posed by exposure to poor air quality from wildfire smoke and identifies 14 actions to help reduce risk of exposure. Leveraging funding from the WA Climate Commitment Act in the first half of 2025, PHSKC and ECO worked to make indoor air quality improvements in residential settings through distribution of 5,000 HEPA air filtration units, supporting residents with no-cost heat pump installations, and other weatherization services for residents living within 10 miles of Seattle Tacoma International Airport
SRFC 4.03.01	Prioritize the identification of strategies, resources, and training opportunities in partnership with frontline communities to ensure residents, communities, and small businesses can effectively respond and recover after a climate and/or public health emergency event. Key Departments/Programs: Climate Action Team, DES-OEM Related Departments/Programs: Public Health, DLS, OESJ	2023	King County is working with local jurisdictions, frontline communities, and partner organizations to develop an Extreme Heat Mitigation Strategy identifying near-term and longer-term heat mitigation actions that King County and community partners can take to effectively address heat impacts. This action is cross listed with the Climate Preparedness section of the SCAP (Prep 3.1.1) King County's 2020 Hazard Mitigation Plan. The target completion date of the final heat strategy draft is June 2024. PHSKC's box fan filter distribution program includes train-the-trainer approaches with its CBO partners to strengthen the cultural context and effectiveness of its engagement with frontline communities.
		2025	The <u>King County Extreme Heat Mitigation Strategy</u> , released in July 2024, engaged more than 900 individuals, including frontline communities to develop 20 heat mitigation actions. Implementation will be prioritized in mapped heat islands. ECO slated funding in 2025 for implementation of four actions prioritized by a community work group. In 2024-2025, WA Ecology contracted with King County to carry out programs with local CBO partners to improve indoor air quality in south King County. This includes building improvements, heat pump installations, HEPA air filter distribution, and home health visits to support response to heat and wildfire events. In 2024, PHSKC developed an EPA grant funded Climate Resilience Action Group to develop community trainings on healthy homes and climate resilience.
SRFC 4.04.01	Partner with frontline communities to identify, evaluate, prioritize, and disseminate key climate and health indicators and mapping data around climate justice, public health, and emergency preparedness to coordinate decision-making and public awareness. Key Departments/Programs: Climate Action Team Related Departments/Programs: Public Health, DES-OEM, DNRP	2023	Several projects are focused on key climate and health indicators and mapping for decision-making. PHSKC has embedded the Washington State Department of Health Environmental Health Disparities (EHD) data mapping tool into the 2023 Determinants of Equity (DoE) Reporting. The purpose is to embed health equity into policy implementation. These standards will require alignment with the King County ESJ Strategic Plan Refresh and alignment with the 2025 SCAP update to integrate accountability. Concurrently, PHSKC is developing a set of climate health data indicators to inform actions for climate change adaptation and response (a shared action with Climate Preparedness, see Prep 4.2.15). CECTF provided input in the spring 2023 and broader community engagement took place in summer 2023. Completion and dissemination of climate health indicators is planned for early 2024. The Climate Team is also a partner with PSCAA in its regional coordination of EPA-funded CPRG Program priority and comprehensive action planning across four counties. This will include a phase two community equity working group and rely on the PSCAA's newly adopted Overburdened Communities mapping tool which overlays four environmental justice maps: the EHD Map, WA Ecology's Climate Commitment Act Overburdened Communities Map, PSCAA's Community Air Tool, and the Justice40 Climate & Economic Justice Screening Tool.
		2025	As a supplement to the King County Extreme Heat Mitigation Strategy, County staff are releasing a Heat & Health Data Explorer Tool to visualize local heat islands, identify areas of high heat risk, and support decision making for impacted communities. In 2024, PHSKC released a Community Health Indicators Dashboard to provide a visual and comprehensive overview of demographic, health outcomes, and health behavior data in King County for various topics ranging from environment to healthcare and mental health.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 5.01.01	Advocate for the expansion of nutrition incentive programs and other support mechanisms for low-income and frontline community members who could be disproportionally impacted by climate-influenced food insecurity to afford fresh, healthy, culturally relevant, and accessible produce while supporting local and BIPOC growers, where possible. Key Departments/Programs: DNRP, LFI, Public Health Related Departments/Programs: Climate Action Team	2023	The King County LFI is a key convener for several regional and state programs expanding nutrition incentives and support mechanisms for frontline communities. However, King County does not have a stable, dedicated, County-based funding stream to address food insecurity. Addressing food insecurity will continue to require multiple partners, jurisdictions, and funding sources. The connections between the impacts of climate change on food security will also need to be strengthened. (1) We Feed Washington – In 2023, the Washington Legislature appropriated \$35 million in state funding for Department of Agriculture grants to support organizations and businesses operating hunger relief projects. The LFI provided technical support to more than 18 local applicants. (2) Farm to Food Bank Harvest Against Hunger King County Farmers Share – this program improves the capacity of local hunger relief agencies to provide access to healthy, affordable food in low-income communities and expand economic viability for County farm and food businesses. (3) King County secured \$100,000 annually from KCD Regional Food System Grant. (4) Food Insecurity in King County Report 2023 –PHSKC completed a 2023 Food Insecurity report on the status of food security and recommendations for hunger relief. The report assessed resources available to food security organizations, the magnitude of food insecurity, the assistance needs of food security organizations, implementation of assistance provided to date, and determined County areas underserved by the existing food security network. (5) Support Enrollment into Basic Food benefits – PHSKC used federal grant funds prior to expiring September 2023 to explore with partners how to develop a unified food security network and better enroll people in services. Between January and October 2022, CHAP navigators enrolled more than 1,600 people into Basic Food and helped more than 2,300 County residents continue their Basic Food benefits. (6) Farmland for growing food – DNRP continues to maintain and grow it
SRFC 5.01.02	Explore and support the development of programs focused on the production and distribution of affordable and healthy foods to communities that live in areas experiencing food insecurity and have low accessibility to public transit, people with disabilities and/or who have health disparities, and people who are disproportionately impacted by climate change.	2025	In 2025, the federal government made cuts or eliminated critical programs supporting low-income families and local food systems. The USDA canceled the \$660 million Local Food for Schools program and withdrew billions from other local food programs, reducing access for schools and food banks. We anticipate termination of these programs and funding will have far-reaching consequences for farmers and hunger relief organizations statewide and potentially reverse gains made in strengthening local food systems and supporting community food security. Public Health has invested \$140,000 annually in five food security networks that, collectively, represent more than 100 hunger relief organizations across King County, to build their capacity to organize and advocate for fresh, healthy, culturally relevant, and accessible produce while supporting local and BIPOC growers. 2025 will be focused on advocating for state funding to fill the massive gaps left by the withdrawal of federal funds and working with private philanthropy to do the same. LFI Refresh 2024 is mid-development, to be completed fall 2024. LFI will realign King County's strategies to expand support to frontline communities in growing, selling, and gaining access to affordable, fresh, and culturally relevant food product with a renewed focus on equity (diversifying farmers and growing capacity), climate change impacts to the food system, and addition of new stakeholders. The plan will also aim to improve evaluation and monitoring, and integration with regional policies including the SCAP and the ESI Strategic Plan Refresh. DNRP is also a partner on CitySoil Farm. 1 Seacre demonstration farm and native tree.
	are disproportionately impacted by climate change. Key Departments/Programs: DNRP, LFI, Public Health Related Departments/Programs: Climate Action Team		SCAP and the ESJ Strategic Plan Refresh. DNRP is also a partner on CitySoil Farm, 1.5-acre demonstration farm and native tree nursery at the WTD's South Treatment Plant in Renton, to showcase sustainable farming and local food. CitySoil donated more than 5,500 pounds of culturally relevant produce to White Center Food Bank in 2021. Through its Re+ program, DNRP-SWD is also working to reduce food waste and advance climate equity. The County and SWD have also supported the passage of state legislation that targets food waste and food insecurity, such as the statewide Organics Management Law that passed in 2022.

Action #	2020 SCAP Priority Action Description	Status	2023
		2025	LFI Refresh was delayed in 2024 but is now on track to be completed in mid-2025. In the second half of 2024 and early 2025 the County engaged in a community wide survey and held more than 20 listening sessions with food system stakeholders and communities to identify needs and strategies for the new initiative. Public Health has been supporting the operation of nutrition incentive programs at the Tukwila Village Farmers Market with over \$60,000 annually and to bring fresh produce grown by local growers to the Tukwila/SeaTac area. Going forward, the LFI team is leading an Agricultural Sector Study to analyze opportunities to address barriers such as housing, health care, farmland access, market access, and farm economics. This report will be completed by the end of 2025. Public Health will close a \$325,000 contract with Harvest Against Hunger that funds local farmers to distribute nutritious foods at King County hunger relief organizations through the Farm to Food Bank Program.
SRFC 5.02.01	Coordinate across ecosystem health, land access, and food systems programs to expand frontline community capacity and access to healthy lands and waters in which to grow, gather, and/or harvest culturally significant plants, foods, and natural resources in a changing climate. Key Departments/Programs: DNRP, LFI, LCI Related Departments/Programs: Climate Action Team	2023	King County is investing in equitable land access by strategizing to preserve natural lands and urban green spaces, in addition to creating paths to land access for food production. The LCI is a 30-year (2016-2046) plan that has made 17 of at least 55 total land acquisitions to create more equitable access to green spaces. The plan is ahead on its land protection and equity goals, exceeding site numbers in opportunity areas to date. The Local Food Initiative, as mentioned in 5.03.01, is also supporting the goal of expanding land access for food production. Most recently, in July 2023, the County's Farmland Access Program was awarded a four-year \$2.1 million USDA grant to support underrepresented farmers in King County. Multiple stakeholders will be engaged to assess past and current work as well as to plan for improved strategies. Additionally, the King County Conservation Futures grant program worked closely with the DNRP Prosecuting Attorney's Office to expand the list of eligible applicants to include CBOs focused on farming access. WTD's Recycled Water program includes Tribes as a key stakeholder and delivers recycled water to farms, sports fields, and industrial sites to save water and build climate resilience.
		2025	King County continues to support programs that expand farmland access for historically underserved farmers. In addition to managing the existing portfolio of farms in the King County Farmland lease program, the County is in the process of developing an additional farm site made available to farmers in 2026. This will add an additional 20 acres of prime farmland to the program in South King County. The Conservation Futures Grant continues growing CBO capacity in partnership with the farm leasing program. Since 2023, six awards have been aimed at expanding farm access for historically underserved communities. Two additional projects are competing for 2026 funding.
SRFC 5.03.01	Partner with frontline communities to support a regenerative and sustainable local zero waste food economy that prioritizes the physical and economic vitality of communities, health of food ecosystems, and well-being of food/farmworkers. Key Departments/Programs: DNRP, LFI Related Departments/Programs: Climate Action Team, Public Health, DLS, CWHH, DES	2023	LFI is leading partnerships with frontline communities and organizations to grow community vitality through supporting sustainable food ecosystems and increasing BIPOC, immigrant and refugee farmer capacity to participate in the local food economy. Examples include (1) Kent Valley Food Entrepreneurship Center: This facility will accelerate the growth of historically underserved community food businesses and improve access to food programming, to be completed by the end of 2024. Funding gaps will be addressed in the Local Food Initiative Refresh in 2024. Partners include Living Well Kent & FareStart. This specific project is at risk due to budget shortfalls for one of the major partners. King County is seeking grants to move this body of work forward. (2) South Seattle Community Food Hub: The County is a partner in this community-driven effort to build critical infrastructure for a more equitable and sustainable regional food system. Currently \$6 million of federal, state, and local funding has been raised with an additional \$4 million needed.
		2025	King County continues to support the development of much needed food system infrastructure that can increase the capacity of local farmers, NGOs and HROs to provide food to King County residents. In 2025, King County launched a partnership with the KCD to increase the knowledge and uptake of Climate Smart/Regenerative Agriculture practices, with a focus on socially disadvantaged farmers. Going forward, the County will continue to support and fund farm to foodbank program and work with partners to develop a long-term financial viability plan for the program. A pilot project with Zero Waste Washington in 2025 will reduce plastic farm waste with a focus on historically underserved farmers. A partnership with KCD will focus on farm business support services including the creation of the FBRC. In 2025, DNRP will complete the redevelopment of the Farm King County website that serves as a one-stop resource for farmers.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 6.01.01	Expand capacity, knowledge, and resources for frontline communities to articulate the connections between housing and climate change through accessible workshops, trainings, informational resources, and/or partnerships. Key Departments/Programs: DCHS, Climate Action Team Related Departments/Programs: Public Health, DLS, DNRP, Metro	2023	Due to capacity constraints, this priority action has not yet been initiated. Partnership planning efforts will begin winter 2023 between the Climate Team, CECTF, DCHS, and the Communities of Opportunity Learning Community to develop and implement a two-part workshop in 2024 on connections between housing and climate change for DCHS community working groups and broader audiences. Partnerships between housing and infrastructure projects like the (DLS) Energize Heat Pump Pilot Program and the CECTF are also being explored to articulate these connections with frontline communities.
		2025	It was the intent of ECO to pursue development of these trainings in coordination with DCHS. However, staffing capacity constraints prevented the team from moving this body of work forward. This action has been proposed in the 2025 SCAP update.
SRFC 6.01.02	Address housing insecurities that are exacerbated by climate change by expanding access to affordable housing resources, homeownership strategies, eviction prevention, equitable development, utility assistance programs, and climate-related home improvements. Key Departments/Programs: DCHS, Climate Action Team Related Departments/Programs: Public Health, DLS, DNRP	2023	Projects across County departments are investing in solutions to mitigate housing insecurities worsened by climate change. County projects building climate resilience in frontline communities include (1) The 2021 King County Climate Equity Capitol Pool Projects are funded by \$20 million in climate equity bond funds allocated for projects identified with the CECTF to support frontline communities in benefitting from GHG emissions reductions, energy efficiency, and green jobs pathways. Seven projects, ranging from White Center Community Development Association retrofits, residential heat pump installation in Skyway, ADA ramp installations in Burien, solar energy for parks, and farmland infrastructure improvements for BIPOC, immigrant, and refugee farmers, are moving forward with several to break ground in 2024. (2) Metro has also integrated TOD metrics into its bus rapid transit lines. Metro is actively working to include affordable housing as a part of one TOD project in permitting and three in concept development as of fall 2023. More resources are needed to implement this strategic action policy.
		2025	In 2024, Metro supported construction of the Northgate Affordable Housing project, a 235-unit mixed-use affordable housing project, serving households earning 60 percent of the area median income or below. This TOD project includes an early learning center, a commercial space and a new comfort station for Metro operators. Additionally, Metro conducted a TOD study to accompany the K line and is writing a request for proposals due out in 2025 for an affordable TOD in Burien, adjacent to the Burien Transit Center. Ordinance 19861 appropriated \$13 million for King County EDI implementation in 2025 including capacity building and capital funds for affordable housing and other community serving use capital projects that address residential and cultural displacement throughout King County. In 2025, DCHS collaborated with ECO on the de-carbonization multi-family funding program to increase resources for publicly subsidized affordable housing for decarbonization improvements. The 2024 Housing Finance Program funding round awarded nine housing projects which will generate 939 affordable homes, comprised of 848 new rental units, 66 renovated rental units, and 25 home ownership units throughout the county. In 2025 DCHS funded 20 agencies working to prevent homelessness through the Youth & Family Homelessness Prevention Initiative program.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 6.02.01	Integrate climate change considerations into affordable housing policies and programs, strategic plans, and mapping practices that impact decision-making. Key Departments/Programs: DCHS, Climate Action Team, DNRP, Metro Related Departments/Programs: DLS	2023	Broad initiatives focused on affordable housing and anti-displacement are underway. These could benefit from closer partnership and strategies related to climate equity and frontline community climate resilience in connection with housing. DHCS and the Climate Team are working on aligning objectives and strategies. Funding and staff are needed to make the connections between these issues explicit and actionable and to pair climate work with affordable housing and anti-displacement initiatives. Examples of current County efforts include (1) The 2021 Skyway-West Hill and North Highline Anti-Displacement Report was shaped by extensive community engagement workshops that were facilitated in partnership with seven community leaders representing six CBOs. Recommendations include community preference for new affordable housing projects in Skyway-West Hill and North Highline, inclusionary housing, and relocation assistance. An inclusionary housing policy with a community preference requirement has been adopted for Skyway-West Hill and North Highline. DCHS anticipates implementing the community preference program in 2024. (2) The King County EDI implementation planning process was launched in 2022 via Council motion 16062. The Phase 1 Implementation Plan report was completed in January 2023 and consisted of a community-driven framework for equitable development and recommendations for a countywide EDI, developed in collaboration with a Community Planning Workgroup (CPW). Phase 2, due January 2024, will identify potential funding options, incorporate displacement risk data, propose strategies for coordination across County agencies, propose roles and duties of a permanent EDI Advisory Board, and more. (3) Through implementation of LCI and Open Space Equity Cabinet goals, qualifying projects that pair open space with affordable housing are encouraged by waiving match requirements in the Conservation Futures grant program. Open space protection and companion tree planting and water play features can help mitigate heat impa
		2025	 The EDI Initiative Phase 2 Implementation Plan, which provides recommendations for implementation and associated activities related to a new King County EDI, was accepted by Council in October 2024. Ordinance 19861 appropriated \$13 million for King County EDI implementation in 2025 including capacity building and capital funds for affordable housing and other community serving use capital projects addressing residential and cultural displacement throughout King County. In 2025 King County released the Skyway-West Hill & North Highline Permanent Affordability Community Planning Support RFP. This RFP will deploy up to \$175,000 for CBOs to further explore permanently affordable housing models in Skyway-West Hill or North Highline with the goal of increasing the supply of affordable housing to mitigate, repair, or prevent residential displacement.
SRFC 6.02.02	Identify community-centered anti-displacement strategies and resources that support climate-resilient infrastructure, reduced housing vulnerability, and economic resilience of frontline community members and small businesses. Key Departments/Programs: DCHS, Climate Action Team, DNRP Related Departments/Programs: DLS, Metro	2023	Connected with SRFC priority actions 6.01.01 and 6.02.01, these projects are reflective of community-centered strategies and resources that support climate resilient infrastructure, housing vulnerability, and economic resilience for frontline communities: (1) the King County Climate Equity Capitol Pool Projects, (2) the 2021 Skyway-West Hill and North Highline Anti-Displacement Report and subsequent Community Preference program to be implemented in 2024, (3) the King County EDI planning process that launched in 2022 via Council motion 16062, requiring a two-phase report on a countywide EDI to address displacement through investments in community-driven capital projects. These strategies and resources will require sources of sustainable funding to comprehensively address housing, climate, and equity. In 2022, DNRP awarded a \$150,000 capacity building grant to The Community Land Conservancy through the Healthy Communities and Parks Fund (HCPF) program. This is an emerging BIPOC-led land conservancy working to pair open space with anti-displacement investments in urban communities. Supporting the creation of this type of land trust was a recommendation in the Open Space Equity Cabinet report for the LCI.
		2025	DNRP-Parks has received a technical assistance award from the Trust for Public Land to help look more closely at policy options that, if implemented, could further expand our anti-displacement work in the context of open space. See also updates for SRFC 6.02.01 regarding EDI anti-displacement strategies implementation and the funds which were appropriated for implementation. These are also applicable to this action.

Action #	2020 SCAP Priority Action Description	Status	2023
SRFC 7.01.01	Partner with utilities and frontline communities to expand utility assistance and incentive programs to increase affordability and accessibility for frontline communities (especially low-income households) and develop new programs to fill gaps not met by existing programs. Key Departments/Programs: Climate Action Team Related Departments/Programs: DCHS, Metro, DNRP	2023	A FUSE Executive Fellow is working with the Climate Team from October 2023 to October 2024 to investigate the utility burden (energy and utility) on renters living in rental housing, identify potential methods to relieve renter cost burden, and make policy and programmatic recommendations for advancing the agenda going forward. This work will equip King County staff with the analysis and tools necessary to drive meaningful progress in climate change mitigation and energy justice in the region. The project will include a survey of Countywide assistance programs in its analysis. DNRP and DCHS partnered with the Washington Department of Commerce, City of Seattle, City of Bellevue, and various affordable housing project developers and property owners to apply for the Connecting Housing to Infrastructure Program (CHIP) grant that would reduce the financial burden for property owners when building affordable housing in the King County wastewater treatment service area.
		2025	In 2024, ECO completed a King County Utility Affordability Status and Recommendations Report. The report included results from a concurrent 2024 King County Renter and Utility Affordability Survey showing about half of King County struggled to keep up with utility bills over the past year. In late 2025, ECO will begin exploring development of a one-stop-shop website and system for utility affordability resources in coordination with local utilities and County programs.
SRFC 7.02.01	Partner with frontline communities to build energy literacy and capacity and support projects that help frontline communities affordably transition to and/or own renewable energy infrastructure and energy-efficient technology. Key Departments/Programs: Climate Action Team Related Departments/Programs: DCHS, DNRP	2023	In 2023, King County (DLS in partnership with the Green Jobs Program) launched the Energize Heat Pump Pilot Program made possible through the Climate Equity Capital Pool, to install high-efficiency heat pumps in up to 190 homes in Skyway and White Center unincorporated areas in 2022-2024, focusing on low- and moderate-income and English second language (ESL) households (100 percent cost-coverage for low-income households, 90 percent cost coverage for moderate income households). The program is seeking robust partnership with CBOs, integration across weatherization programs and funding to expand its scope. The first public workshop took place in August 2023.
		2025	In 2024, ECO hosted a Climate Justice Learning Series workshop on Energy Justice 101 for frontline community members. The King County Energize program installed heat pumps in 103 frontline community households in 2024, helping reduce energy burden and increase climate resilience. In 2025 an expanded Energize program will install heat pump and other energy efficiency improvements in 150-200 homes in King County. ECO is also working with partners to pilot a community solar project.
SRFC 7.03.01	Advocate for frontline community participation in energy policy, decision-making, and regulatory tables (including outside of King County's jurisdiction), and model frontline community participation within King County's own energy programs and policies.	2023	This priority action is not yet started, due to staffing capacity. A strategy is being identified to better partner with frontline communities on energy-centered policy and decisions, with the goal to resource the development of models of community collaboration in this sector. The Climate Team will identify key stakeholders to begin outreach for a 2024 convening on community participation in energy policy.
	Key Departments/Programs: Climate Action Team Related Departments/Programs: Executive Office	2025	This priority action is not yet started, due to staffing capacity required for coordinating with external partners. Preliminary engagement with community on this topic was done through the Climate Justice Learning Series (see SRFC 7.2.1). This action is included in 2025 SCAP update to enable a longer runway for coordination.
SRFC 8.01.01	Prioritize frontline communities that are in greatest need of public transit in transit accessibility policies and practices. Continue to improve and design accessible communications in multiple languages, enact equitable and affordable fares, and increase mobility by connecting public transit infrastructure. Key Departments/Programs: Metro Related Departments/Programs: Climate Action Team, DCHS, DLS	2023	Metro is advancing pro-equity, climate resilient transportation policies and investments that prioritize frontline communities through the following initiatives: (1) Convening a Fares Cabinet comprised of community members to co-plan improved reduced fare programs in 2024, (2) integrating the community co-created Metro Mobility Framework into the 2021-2031 Metro Strategic Plan, (3) implementing the Service Guidelines that include changes in 2021 to focus on equity – improving services for priority populations, (4) Youth Free Fare for riders 18 and under launched 2022, (5) developing a language equity policy in 2024, (6) preparing and distributing in-language service updates related to extreme weather conditions (see also Prep 3.1.3), and (7) improving access for frontline communities in south King County through projects like Metro Flex, building out Transit Hubs, and using Service Guidelines to continually evaluate and update services.

Action #	2020 SCAP Priority Action Description	Status	2023
		2025	In 2024 Metro convened a <u>Fares Cabinet</u> to help identify the potential impacts of a cashless fares transition, key barriers preventing cash payers from using other fare media, and key milestones and strategies to support these riders during the transition. The Fares Cabinet is comprised of 17 members who have lived experience as riders, cash payers, and users of a variety of reduced fare programs and products. King County will work with the Fares Cabinet to finalize a cashless transition plan. As the plan is implemented, Metro will share progress towards milestones and recommendations, engage with riders, and adjust implementation approaches as needed.
SRFC 8.02.01	Improve and develop infrastructure that is climate resilient with a design process that uses a clear climate justice lens in capital planning and design processes and emergency planning. Key Departments/Programs: Metro Related Departments/Programs: Climate Action Team, Public Health, DES-OEM	2023 2025 2025	Metro is addressing climate resilience using a climate justice lens in capital planning and design processes, and in emergency planning (a shared priority with Prep 3.1.4). Projects include (1) the King County Metro Climate Change Asset Vulnerability Study completed in 2022 (Prep 2.2.12), (2) the South Annex Base at 30 percent design in 2023, and (3) improvements to RapidRide H and I Line amenities and shade assets to mitigate high heat events in implementation and planning phases in 2023. Reviewed findings from Metro's Climate Change Asset Vulnerability Study with applicable divisions and identified key next steps for implementation. In April 2024, Metro received the Envision Platinum Award from the Institute for Sustainable Infrastructure, recognizing the project's comprehensive equity and sustainability improvements. Riders are better protected from heat, wind, rain, and other extreme weather conditions attributed to climate change thanks to better bus station designs and frequent service that keeps rider moving. Improvements program again met the target of installing at least 10 percent of new weather-related improvements in climate priority areas (i.e. areas that experience extreme heat). The RapidRide G line will also provide these benefits and the South Annex Base advanced to 100 percent design. Going forward, Metro will consider Vulnerability Study recommendations in development of 2026-27 budget. Work is underway for the RapidRide I Line, which is also aiming for Envision certification with a Fall 2027 opening. Lastly, Metro will evaluate available budget and next steps for South Annex Base.
SRFC 8.03.01	Work to ensure the design and planning process of public transit, streetscapes, and accessibility features are community-driven, equitable, minimize displacement, and are built in partnership with frontline communities, including the Metro Mobility Equity Cabinet and the CECTF. Key Departments/Programs: Metro Related Departments/Programs: Climate Action Team, DCHS, PSB, DLS	2023	To co-create solutions and build long term partnerships that ensure community-driven transit development in King County, Metro convened and established the Metro Mobility Equity Cabinet in 2019, a group of leaders representing frontline communities. Related bodies of work include: (1) ongoing partnership with and support of the Metro Mobility Equity Cabinet, (2) Equitable TOD metrics integrated in the scope of its first bus rapid transit (BRT) line to be repeated as BRTs expand, (3) active work to include affordable housing as part of one project in permitting and three in concept although more resources are needed to implement the policy, (4) completion of culturally relevant media advertising in five languages and extensive community engagement to plan for RapidRide I Line serving in Renton, Kent, and Auburn.
		2025	A culturally relevant and extensive community engagement to plan for the RapidRide I Line and K Line informed through TOD studies to identify displacement risk in station areas. Intentional engagement for the K Line and the I Line will continue through the end of 2025. The Metro Mobility Equity Cabinet will engage to shape Metro's Mid-Range Plan for 2038.

Table 3. 2020 Climate Preparedness Priority Action Status

Action #	2020 SCAP Priority Action Description	Status	Additional Information
PREP 1.1.1	Adapt centralized capital planning and review processes to include climate considerations earlier in project planning and budgeting stages. The Climate Action Team will partner with the Capital Projects Management Working Group, the Office of Performance, Strategy and Budget, and other partners to identify and implement changes in capital planning and budgeting processes that support early inclusion of climate mitigation and preparedness options in those processes. This includes looking at steps related to project planning, chartering, predesign, and budgeting. (Climate Action Team)	2023	Initial guidance added to Capital Projects Management Working Group resources site for capital projects managers. Deeper discussions are planned for fall 2023. Work will also leverage related program-specific capital planning integration work underway within DNRP-WTDand River and Floodplain Management Section.
		2025	Interviews conducted with County subject matter experts to identify opportunities to integrate climate change into King County capital planning processes. Information from those interviews was used to inform an initial set of meetings in 2024 with staff to start mapping out key issues. Staff capacity constraints limited discussions in late 2024 and early 2025. Discussions will continue in 2025 and as part of the 2025-2030 SCAP.
PREP 1.1.2	Establish an interdepartmental King County climate preparedness workgroup. The Climate Action Team will establish an interdepartmental climate preparedness workgroup to support implementation of SCAP	2023	Anticipate convening in 2024 as part of 2025 SCAP development.
	preparedness actions and to provide technical input on other crossorganizational preparedness needs. (Climate Action Team)	2025	Decision made in early 2024 to not establish a standing single group. As-needed topic-based groups were determined to be a better way to engage staff on strategic questions. Various topic-based workgroups (e.g., capital planning, river flooding, sea level rise, etc.) were created in 2024 to provide input on the 2025 SCAP. Will continue to use those groups as-needed for strategic input.
PREP 1.1.3	Develop a funding toolbox for financing climate preparedness needs. The Climate Action Team will evaluate the role of traditional and emerging options for funding climate preparedness, including options for incentivizing preparedness investments, and develop recommendations for how those funding tools could be used to fund preparedness needs. (Climate Action Team)	2023	Worked with UW Evans School student team in 2021 on resourcing climate adaptation in King County. Study reviewed existing approaches to funding (e.g., grants, bonds, user fees, etc.); report also included recommendations and areas for further research. Work has also included looking at a revolving loan fund pilot project for shoreline work (Puget Sound Partnership) and resilience authority model from Maryland, but additional research is needed regarding feasibility.
		2025	Work on this concept continues. Focus is increasingly on integrating climate change into work covered by existing funding mechanisms, in addition to exploring new/other approaches. Worked with UW Evans School student team in 2024 to identify potential funding options for extreme heat work and approaches to doing benefit cost analysis to support FEMA grant applications. 2025 work will look at funding approaches for sea level rise adaptation.
PREP 1.1.4	Finalize performance measures for climate preparedness. The Climate Action Team will develop a final list of performance measures for King County's climate preparedness efforts. These performance measures will leverage existing and emerging performance measurement frameworks to track progress on reducing climate impacts and increasing the resilience of King County communities, natural systems, and the built environment. (Climate Action Team)	2023	Initial measures developed for climate resilient natural systems. Work on draft measures for climate resilient communities and natural systems to resume in fall 2023/winter 2024.
		2025	New performance measurement framework developed as part of 2025 SCAP addresses this action. New framework measures progress towards key outcomes that collectively help us understand what a climate resilient King County looks like. Framework leverages existing measures and includes new measures. Measures will be evaluated and updated as needed over time.
PREP 1.2.1	Develop and implement a climate change capital planning strategy for flood mitigation projects. WLRD will examine approaches to incorporating more adaptability in the design and building of capital projects for flood mitigation as part of the update to the King County Flood Hazard Management Plan. Results from this work will inform the development of a strategic approach to integrating climate change into flood mitigation capital projects.	2023	Climate change is one of three primary themes being built into the goals, objectives, and policy framework for the Flood Plan update, which will be completed in 2024. The Flood Plan will guide work related to understanding the implications of climate change on flooding and risk management. This work will inform programmatic and capital planning for flood risk reduction, including consideration of additional safety factors. Additionally, an approach for incorporating climate change into capital planning has been piloted with the Tolt River Level of Service Project (see Action 2.2.1) and is serving as the basis for initial guidance on integrating climate change into capital planning.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
		2025	The King County Flood Management Plan was adopted in 2024. It includes policies requiring the use of climate change data in flood risk reduction decision-making and additional factors of safety in project designs. Future flow conditions are currently being considered in the evaluation and design of capital projects where the data exists. Standardization of the approach to doing this across all projects countywide is needed. In progress work by the UW Climate Impacts Group to model potential changes in flows due to climate change is expected complete by Dec. 2025. This will inform further development of this strategy. Work remains to develop and implement this strategy.
PREP 1.2.10	Incorporate best available information on climate impacts into the implementation of the 2020–2025 Parks, Recreation, Trails and Open Space Levy. King County Parks will implement levy commitments with consideration given to climate change preparedness, as appropriate. This includes, for example, incorporating anticipated climate change impacts into capital planning, project delivery, and asset management; including SCAP-related considerations in Parks' grants and funding awards; addressing climate change considerations in the 2021 update of King County's Open Space Plan; and prioritizing urban equity acquisitions that produce multiple benefits, like	2023	 This is a continuous and comprehensive action. Key examples of complete or ongoing work include: The Parks Open Space Plan was approved by Council in 2022, with added sections on climate connections to planning, the LCI, and SCAP connections. Planning to strengthen climate preparedness in next Open Space Plan noted. Parks is continuing to pursue more property acquisitions in urban areas, and an urban forester has been hired to keep these forests healthy and increase overall urban tree canopy. DNRP created the Urban Forest Forum, which convenes cities quarterly to discuss urban forestry issues. Climate change has been integrated into appropriate Parks grant criteria.
	addressing urban heat island effects and providing green stormwater benefits.	2025	This work continues across various programs, including 1) continuing to expand Parks' forest stewardship capacity, including new Parks Operations Specialists and a wildfire mitigation and preparation specialist (shared with WLRD), and 2) updating Parks' forest stewardship plans with improved wildfire content. Significantly, the next iteration of the Parks Levy (2026 - 2031, should it be approved by voters in Aug. 2025) proposes new investments in climate resilience to complement ongoing programs.
PREP 1.2.11	Incorporate best available information on climate change impacts into the delivery of capital planning, capital projects, and program delivery for Roads. The Roads Division will incorporate information about climate change impacts into Division capital planning, capital projects, and program delivery to the extent feasible under available funding to help ensure that service	2023	The Green Buildings Scorecard reporting is the primary mechanism that Roads uses to account for climate impacts. Enterprise-wide climate information is needed for both planning and ideas, and budgeting and prioritization of capital projects. Related preparedness actions on capital planning (Prep 1.1.1.), the climate change resource hub (Prep 2.1.1), and climate scenarios (Prep 2.1.2) will support this action once those actions are completed.
	reliability, public safety, equity, and environmental goals are met in the face of a changing climate.	2025	Work on this action continues to be coordinated with the related preparedness action of Prep 1.1.1. Roads will continue to support this action.
PREP 1.2.12	Update Metro operating protocols and plans to account for wildfire smoke and other extreme events. King County Metro will review current operating protocols to ensure that existing protocols are current with recent trends in extreme events and expected climate change impacts. New protocols for managing wildfire smoke will also be developed.	2023	Buses will be updated to MRV13 filters, following the upgrade of all existing buildings (including future buildings) to MRV13 filters, the highest available standard. The Wildfire Smoke Action Plan being updated in compliance with the temporary Washington Department of L&I standards and will again be updated once permanent rules from L&I are released.
		2025	Drafted updated policies for Wildfire Smoke Exposure Control and Outdoor Heat Stress and submitted to Metro General Manager for signature. Staff are working to have signed policies for Wildfire Smoke Exposure Control and Outdoor Heat Stress that comply with the new WAC requirements by the end of 2025. The Wildfire Smoke Exposure Control Plan and Outdoor Heat Illness and Injury Prevention Policies have been updated to meet the compliance requirements listed in, Department of Labor and Industries WAC 296-62-085 and 296-62-095, respectively.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
PREP 1.2.2	Improve permitting guidance related to sea level rise and bulkheads. The Permitting Division, in partnership with WLRD and the Climate Action Team, will develop updated guidance for property owners and County staff related to sea level rise, shoreline development, and bulkheads. This work will also include improved guidance and/or recommended code changes related to	2023	A WA Ecology grant was secured for this work in 2022. Initial work has prioritized code changes proposed for the 2024 Comprehensive Plan update. Next steps include working with internal staff to develop a prioritized list of regulatory and process barriers that have allowed the use of hard armor when the use of soft shore armoring was a legitimate option, and that limit planning for sea level rise. That information will be used to create guidance, checklists, and public information sources for both internal staff and external customer use.
	bulkheads that add clarity to the administrative interpretation of existing code, inclusive of sea level rise considerations.	2025	Identified and proposed code change recommendations aimed at reducing regulatory barriers to prioritizing non-structural shoreline stabilization. Integrated into code changes approved as part of the 2024 King County Comprehensive Plan update. Developed a suite of nine draft products (information sheets and permit checklists) in consultation with internal and external subject matter experts that address common challenges and information needs related to marine shoreline stabilization permitting. Products designed to provide increased clarity on the process and information needs. Documents also address questions related to sea level rise. Products will be finalized and posted for public use in 2025.
PREP 1.2.3	Develop guidance and recommendations to further incorporate climate change considerations within WTD programs, projects, and operations. WTD will establish a Climate Adaptation Work Group and utilize their expertise to further develop, document, and communicate guidance and procedures for systematically addressing climate change impacts within WTD programs, projects, and operations. This includes developing guidance that helps	2023	Draft combined sewer overflow (CSO) sizing guidance has been completed and is under leadership review. Guidance piloted for design of West Duwamish storage tank and Mouth of the Duwamish CSO Program. Draft sea level rise guidance is also in progress. A lead has been hired for the WTD's Climate Adaptation Planning Program and will help devise a strategy for WTD capital planning and climate change.
	establish division-wide priorities and coordination of recommended	2025	Final CSO sizing guidance was completed in 2023 and is being applied to CSO capital projects. Draft sea level rise guidance finalization was paused and will be part of long-term wastewater climate adaptation plan being developed (2025 SCAP action).
PREP 1.2.4	Develop a methodology and standard for assessing climate resiliency for stormwater management. WLRD will develop a methodology and standard for conducting climate resiliency analyses for stormwater management. This includes evaluating the impacts of additional climate change scenarios at more locations around the County to better understand the effects and broader implications of increased rainfall on stormwater infrastructure in	2023	Staff capacity, funding constraints, and technical questions have slowed this work. To help accomplish part of the planned work, King County is partnering with the WA Ecology to integrate current climate change projections into Ecology's stormwater design software. This will enable modeling of climate change impacts on stormwater runoff management in Western Washington and evaluation of alternative management measures and their effectiveness in mitigating climate impacts. This will serve as a key tool for developing a methodology and guidance for King County stormwater management.
	King County. Results from this work will help inform what combination of regulatory changes, operational changes, and capital investments will achieve the best outcomes for climate resiliency.	2025	WLRD is partnering with UW CIG on a National Estuaries Program grant awarded by the Puget Sound Partnership. As part of this work, WLRD is assisting in the development of an improved bias correction methodology, which is foundational for developing projections of future rainfall. Bias correction methodologies will still be in progress in December 2025. Models developed for the Water Quality Benefits Evaluation (WQBE) Toolkit will be used to test the corrected climate projections and completed in 2026. Conducting a climate change critical infrastructure analysis using the WQBE model is currently unfunded; this analysis is needed to develop guidance. Staff will be looking for funding as part of next steps.
PREP 1.2.5	Include the effects of future climate conditions in prioritization of fish passage barriers. WLRD will work with partners to develop and implement a fish passage barrier prioritization method that includes evaluation of how climate change may affect fish passage. WLRD will then incorporate the prioritization output into the planning of fish passage restoration across county agencies.	2023	Work on this action determined that climate change was more relevant to design criteria than prioritization, given where fish passage barriers are location (inclusion in prioritization did not yield enough differentiation in projected changes to make a difference in prioritization and could bias selection to upper watershed sites rather than lower reaches). Focus is on using climate change more as a screening tool (in combination with the habitat score) for project identification in biennial budgeting and development of six-year Capital Improvement Plans, and in the design of fish passage barrier removal projects (see Action 1.2.6).
		2025	No update required on this action. Work complete as of 2023 update.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
PREP 1.2.6	Factor future climate conditions into design, operation, and maintenance of assets in streams. WLRD will work with King County agencies responsible for fish passage barriers to develop guidance, methods, and standards for incorporating projected climate change impacts on King County streams into county asset management efforts that affect fish passage.	2023	Climate change has been factored into the design of the removal of every fish passage barrier project since 2019, using projections for the 2080s when evaluating climate impacts (to match the life of the structure). Staff are using scenarios from the UW Climate Impacts Group/Washington Department of Fish and Wildlife culverts tool, using median bank full width as the primary basis with which climate change is factored into barrier removal design.
		2025	No update required on this action. Work complete as of 2023 update.
PREP 1.2.7	Update the King County Habitats of Local Importance and Species of Local Importance lists in the King County Comprehensive Plan to account for climate impacts. WLRD will use existing literature, data, and expert input to evaluate climate change impacts on species and habitats in King County. Results from the assessment will be used to update the King County Comprehensive Plan. Results from the evaluation will also inform open space management, acquisition, habitat restoration, and other activities undertaken by the County and regional partners.	2023	The King County Habitats and Species of Local Importance lists identify species and habitats protected in the King County Comprehensive Plan and Critical Areas Ordinance and are being updated as part of the 2024 Comprehensive Plan update. Resources being used to update those lists were informed by climate, though there was no species-by-species analysis due to resource and time constraints. Staff will look into the State Wildlife Action Plans for additional information on climate impacts on individual species.
		2025	The 2015 Washington State Wildlife Action Plan was consulted. The state is currently updating that plan for the 2025 edition and was therefore not ready in time for the County's updates to the Comp Plan. Staff updated our list based on the 2015 plan and other available resources. Staff created a table that also now shows the level of risk of each species specifically from climate change.
PREP 1.2.8	Update King County's Comprehensive Plan Biodiversity Conservation Approaches and DNRP's Ecological Lands Handbook to account for the impacts of climate change.	2023	The Comprehensive Plan's Biodiversity Conservation Approaches has been updated to include information on climate change and is in review. The Ecological Lands Handbook has not been updated; a path forward for the update is contingent on additional internal discussions with key program partners and finding additional resources for the task, which is larger than originally anticipated.
	WLRD will update the Comprehensive Plan's Biodiversity Conservation Approaches section and the DNRP Ecological Lands Handbook to reflect our current understanding of climate change impacts on ecological systems. This update will help ensure that recommendations and decisions based on these documents are made with the best currently available information.	2025	Work on updating the Ecological Lands Handbook was put on hold. Staff identified the need for an updated approach to managing King County natural areas. At this point in time, it is unknown if this handbook would be a part of that change.
PREP 1.2.9	Update Parks operating protocols and communications plans to account for wildfire and other extreme weather events. King County Parks will review current operating protocols and communications plans to ensure that existing protocols are adequate relative to recent trends in extreme events and projected climate impacts. New protocols for managing wildfire smoke	2023	Poor Air Quality protocols related to wildfire smoke for Parks staff and the public have been completed and internally published along with general information on air quality, which is regularly referenced by staff.
	exposure for staff will also be developed.	2025	No update required on this action. Work complete as of 2023 update.
PREP 2.1.1	Develop and maintain a Climate Change Resource Hub to inform climate preparedness activities at King County. The Climate Action Team will develop and maintain a common set of climate resources to support incorporation of climate impacts considerations into	2023	The climate change resource hub is in development and will be released in fall 2023. The hub includes resources to support SCAP implementation across all sections of the SCAP, inclusive of climate preparedness. The site will be updated based on user feedback as new resources become available.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
	County decision processes and other activities. Shared resources include best practice guidelines, technical studies, data, GIS resources, training opportunities, and tools.	2025	ECO launched the Climate Change Resource Hub for internal use in January 2025. The site is designed to support SCAP implementation. Content includes information about ECO, monthly Climate Action Talks (CATs), and the SCAP; and information and resources on greenhouse emissions reduction work, climate equity and workforce development, and climate preparedness (e.g., data, reports, etc.). Maintenance, monitoring of Hub-related feedback, and content updates will be ongoing.
PREP 2.1.2	Develop a shared set of climate change scenarios for use in capital planning and other decision-making across County programs. The Climate Action Team will partner with the Capital Projects Management Working Group and other	2023	Scenarios will be developed as part of ongoing discussions related to integrating climate change into capital planning processes.
	to develop a common set of climate change scenarios and technical guidance for use by King County programs. The scenarios and guidance will be included in the Climate Change Resource Hub and updated as needed based on best available science.	2025	Scenarios development has been integrated into climate change and capital planning discussions being held as part of Prep 1.1.1. Scenario data sources have been identified. Will be developing information on the scenarios and review with staff later in 2025.
PREP 2.2.1	Evaluate how projected changes in flooding affect infrastructure and flood mitigation activities in King County. As part of the Flood Hazard Management Plan update, WLRD will examine how currently projected climate-driven changes affect future flood risk, and in turn evaluate impacts to future flood mitigation efforts in King County. The River and Floodplain Management Section (RFMS) will also look at relevant data with stakeholders to evaluate the impact of sea level rise on coastal properties and evaluate risk reduction measures for properties throughout the county. These efforts will be aimed at developing a more flood- and climate change-resilient community.	2023	Staff are engaging other jurisdictions (including Pierce and Whatcom counties), consultants, and internal staff to determine the different approaches for addressing climate change in terms of facility design. Staff are drafting content to be included in the updated Flood Plan that lays out high-level facility design guidelines for levee projects using the Tolt River Level of Service project as a case study. That study found that that the levee system would need to be, on average, up to two feet higher than if it was designed to the existing 100-year flood event design criteria. This additional levee height will accommodate the projected increase in the 100-year flood event resulting from changes in hydrology and the corresponding change in bed sedimentation Staff also want to look at designs for 500-year events.
		2025	A two-dimensional model of the Snoqualmie Valley was developed to evaluate impacts from flooding under current and future conditions resulting from climate change. The model was completed in January 2025 and is available for future analyses. UW Climate Impacts Group Phase 3 Reporting is expected in December 2025 and will inform future analyses and flood mitigation activities. Future flooding conditions resulting from climate change will be considered in ongoing and planned Capital Investment Strategies.
PREP 2.2.10	Develop a systematic approach for updating and maintaining King County's landslide inventory database and landslide hazard mapping. WLRD, in partnerships with other internal and external partners, will update the County's current landslide inventory database and landslide hazard maps along river corridors and all areas in unincorporated King County, with the goal of developing a more systematic approach for mapping hazards, tracking	2023	A portion of this action is being addressed via the Best Available Science (BAS) review completed for the 2024 Comprehensive Plan update, but funding and staffing are needed to complete the work. The BAS review included an update on the current state of the art for mapping, regulations, and strategies for alluvial fans. Implementing the updated alluvial fan mapping and mapping of any other geological hazard areas is dependent on available funding, staffing, and a County plan to maintain the inventory and develop a strategy with respect to climate changes.
	events, and sharing landslide information relevant to public safety, land use, permitting, asset management, flood risk, and emergency management decisions.	2025	No change since 2023 update. Funding and staff capacity could not be secured. Will continue looking for opportunities but no further work planned as part of the 2025 SCAP.
PREP 2.2.11	Explore opportunities to update the 2006 vulnerable roads assessment and incorporate climate change impacts as a factor in that assessment. The Roads Division will explore opportunities to update the 2006 vulnerable roads assessment and incorporate climate change impacts as an evaluation factor	2023	Roads has received a hazard mitigation grant to complete the vulnerable roads study. Work will begin in 2024. This update will update information on and map vulnerable county-owned transportation infrastructure, inclusive of climate impacts like sea level rise and wildfires. Study will be based on available information. The study will also create a risk model, resulting in a more dynamic framework for incorporating new information and modeling as it emerges.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
	in that assessment. Information from that assessment will be used to inform capital planning and project delivery in Roads, among other activities.	2025	Scope of Work and Evaluation Criteria completed mid-January 2025. Evaluation panel convened to evaluate proposals mid-March. Process is on-track to complete Level of Effort and Contract Execution by mid-May. Project is projected to be completed no later than June 2026. Anticipate that slightly more than 50 percent of the scope of work should be complete by December 2025.
PREP 2.2.12	Conduct a climate change vulnerability assessment for Metro and identify actions that can be taken to address those impacts. Metro will conduct a climate change vulnerability assessment that evaluates and prioritizes climate change impacts for current and planned Metro operations, assets, and service delivery, including the proposed South Base in south King County. Metro will also identify actions for equitably addressing priority impacts identified in the assessment.	2023	The climate change vulnerability assessment for Metro is complete. Overall, impacts to Metro facilities are expected to increase in the coming decades but the risks are manageable if planned for. The study's risk analysis model suggested that high heat is the most impactful climate-related hazard facing Metro, followed by winter storms. Other hazard types are more of a concern for location-specific assets, such as flooding, wildfire, and landslides. As part of the project deliverables, the study recommended several adaptation strategies such as updating design process and evaluating property redevelopment opportunities to support climate change needs and equity priorities. Metro plans to integrate findings from the Climate Change Asset Vulnerability Study into the Business Plan, 2025 Budget process, and operational practices per Metro Leadership Team Decision Package made in August 2023.
		2025	No update required on this action. Work complete as of 2023 update.
PREP 2.2.13	Evaluate how groundwater levels at KCIA change in response to seasonal changes in rainfall and tidal fluctuations. KCIA will partner with WLRD to evaluate the sensitivity of groundwater levels at the airport to seasonal changes in rainfall and tidal fluctuations. The assessment, which will leverage U.S. Geological Survey (USGS) modeling work planned as part of the 2020 SCAP, will inform long-term planning related to stormwater management and adapting airport infrastructure and operations to the impacts of climate change.	2023	Work is connected to WTD sea level rise groundwater study being conducted with the USGS (see Action 2.2.4); that study is getting underway in fall 2023 and will go through 2025. KCIA will provide access to wells for the groundwater study and/or access for new well installations to support the study.
		2025	Special Use Permit processed to perform work at the airport. USGS started quarterly groundwater sampling efforts at the airport's two locations. USGS monitoring and progress meetings with DNRP continuing through 2Q 2026. Monitoring will support groundwater model development.
PREP 2.2.14	Develop a sustained monitoring program for tracking offsite stormwater flows that affect KCIA. KCIA will develop a sustained monitoring program for tracking offsite stormwater flows onto airport grounds to better understand the potential effects of offsite drainage on stormwater management capacity. Information from that monitoring program will examine 1) how much runoff is entering airport property, 2) how that runoff varies based on	2023	The offsite flows monitoring program has been created and will continue through 2025, with a final report to be generated upon completion of monitoring. Current results indicate approximately 40 percent of stormwater in Basin 3 is from offsite areas. KCIA is currently in the pre-design process to survey and analyze solutions including a stormwater detention facility for Basin 3.
	seasonal patterns and antecedent conditions, and 3) the effectiveness of efforts to reduce that runoff.	2025	Monthly stormwater flow monitoring and reporting in progress. Work scheduled to be completed by 2Q 2025 with final reporting.
PREP 2.2.15	Evaluate the impacts of heavier rain events on stormwater capacity at KCIA. KCIA will leverage new climate change scenarios for rainfall in King County to examine how projected changes in rainfall intensity and duration affect stormwater capacity at the airport. Information from the assessment will be used to support long-term planning and asset management at the airport.	2023	Evaluation complete and summarized in final project report. Study incorporated new projections for rainfall on stormwater capacity at KCIA, which included climate data for the 2040s and 2080s. Results show that current problem areas expected to intensify with climate change. KCIA is using projected rainfall for the 2040s as the baseline for project design when adding more stormwater capacity in Basin 3. The costs versus benefits of designing projects for projections further into the future still need to be analyzed.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
		2025	No update required on this action. Work complete as of 2023 update.
PREP 2.2.16	Complete a climate change vulnerability assessment and action strategy for SWD. SWD will conduct a rapid climate change vulnerability assessment that evaluates and prioritizes climate change impacts on SWD assets and operations, and identifies actions for addressing key impacts. Results from	2023	Initial project scoping in progress. SWD will hire a consultant to conduct the assessment for SWD facilities and operations. Assessment will draw from existing literature as well as staff engagement and spatial analysis, where relevant. Expect to have the assessment completed by fall 2024.
	the assessment will help SWD be strategic in addressing climate change impacts as part of asset management and long-term planning.	2025	The Climate Change Vulnerability Assessment was completed in 2024. The report presented the climate change-related risks and potential impacts to SWD systems and operations and identified priority strategies to address those risks and impacts. Key findings include: 1) SWD staff regularly deal with challenges to operations from extreme heat and wildfire smoke; 2) generally, the most vulnerable systems include water-related systems, such as contaminated stormwater, leachate, industrial wastewater, and stormwater systems that were designed for historic conditions and are sensitive to future changes, and 3) environmental monitoring systems, landfill gas extraction, and landfill cover systems are critical infrastructure and are vulnerable to future changes as well.
PREP 2.2.2	Assess the hydraulic impacts of saltwater intrusion on the WTD conveyance system and develop a strategy for addressing those impacts. WTD will conduct a salinity intrusion study to provide an updated understanding of the scope and scale of salinity intrusion into the wastewater conveyance system. WTD will also develop recommendations for reducing salinity intrusion in the wastewater conveyance system.	2023	Sensors along the main conveyance lines were installed in 2021 to identify and quantify the sources of saltwater entering WTD's West Point system. Areas of intrusion have been identified; major sources are being fixed based on volume of saltwater coming in. Final report and recommendations for next steps being developed.
		2025	Final report is complete. Findings show total flow going to West Point is between 0.6 percent to 1.4 percent on an annual basis (~160 MG to ~400 MG) and did not change much between 2006 to 2023. The report also summarizes recommended future work for reducing saltwater inflow.
PREP 2.2.3	Expand WTD's assessment of how projected changes in rainfall intensity affect the wastewater system. WTD will expand an initial assessment of heavy rain events completed as part of the 2015 SCAP to include data from up to 10 additional climate scenarios, providing a more robust assessment on how changes in the intensity, duration, and magnitude of heavy rain events in King County affect wastewater conveyance and treatment.	2023	Completed an expanded analysis of climate change impacts on CSOs. A technical memorandum detailing the scope and scale of impacts from changes in rainfall in terms of flow, timing, and frequency also completed. Assessment results were used to inform CSO sizing guidance for capital projects; that guidance is under Leadership review (see Prep 1.2.3). As climate science becomes available and improves, additional modeling work and updates to guidance are expected.
		2025	No update required on this action. Work complete as of 2023 update.
PREP 2.2.4	Partner with the USGS to aid in the development of their Puget Sound Coastal Storm Modeling System. WTD will partner with the USGS to evaluate projected changes in the magnitude, frequency, and timing of coastal flooding along key segments of the King County shoreline important to WTD. The study will also assess the influence of sea level rise on groundwater levels in the lower Duwamish River valley and evaluate potential changes in bluff erosion at a limited number of locations on Vashon Island.	2023	The Puget Sound Coastal Storm Modeling System (i.e., the CoSMoS model) is under development with deliverables, including general groundwater results and coastal flooding data expected by summer 2024. Coastal flood modeling is being done for the entirety of the King County shoreline; groundwater modeling is focused on the lower Duwamish waterway (related action: 2.2.13).
		2025	The CoSMoS model is under development with deliverables, including general groundwater results and coastal flooding data expected by summer 2025.
			Preliminary data was received Spring 2025. Coastal flood modeling is being done for the entirety of the King County shoreline; groundwater modeling is focused on the lower Duwamish waterway (related action: 2.2.13).

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PREP 2.2.5	Investigate the use of smart system technology and operational adjustments to optimize performance of existing stormwater assets. WLRD will pilot the use of remote sensors to monitor facility performance in real time and use that information to identify options for modifying facility outlet control devices to improve performance. Stormwater Services will also evaluate	2023	The first two Opti control systems have been installed as a pilot project; went online in 2023. Maintenance and data collection to follow. The systems are designed for two- or 10-year storms. The literature review and summary report with recommendations for stormwater management methods and practices that could increase climate resilience has not begun due to limited staff capacity.
	stormwater management methods and practices that could increase climate resilience. This includes evaluating changes in maintenance cycles/intervals to maximize performance and bio-swale vegetation management.	2025	No change from 2023 update. Reviewing cost versus benefits of adding more Opti systems with leadership. Decision to expand use beyond current systems pending. Maintenance and data collections from current systems ongoing.
PREP 2.2.6	Assess potential benefits of levee setbacks on summer low-flow conditions. WLRD will examine the potential benefits of levee setbacks on groundwater recharge in floodplains and determine if, and to what degree, any benefit could help mitigate projected decreases in summer flows as a result of climate change.	2023	Literature review completed. The review found that levee setback/removals and other channel-floodplain reconnection projects have a reasonable likelihood of increasing stream temperature diversity and the area or number of cold-water patches. Benefits to summer baseflows are uncertain and need further study. DNRP staff are using the Fall City levee removal project as a study site for evaluating the impacts of levee setbacks on groundwater levels and summer streamflow.
	omnate change.	2025	No update required on this action. Work complete as of 2023 update.
County change stream Cedar r assessn	Evaluate projected changes in summer streamflow volumes in major King County watersheds. WLRD will utilize a recently expanded set of climate change streamflow data to evaluate projected changes in summer low streamflows for the Green and Snoqualmie rivers. Analyses for the White and Cedar rivers are contingent on data availability. Information from this assessment will be used to inform salmon recovery and habitat restoration projects, strategic planning, and outreach efforts.	2023 → SOON	Study feasibility being assessed. Work contingent on availability of funding and using data from UW Climate Impacts Group study on King County rivers (in progress). Potential streamflow locations for the study are being identified in consultation with technical coordinators and partners. Decision on whether study will be able to move forward expected in late 2023/early 2024.
		2025	Action looked to leverage data on summer streamflow that were included in model runs for UW Climate Impacts Group study on flood flows in King County, however the summer low flow data was deemed to be not well suited to this analysis. Work on action concluded; no further action planned.
PREP 2.2.8	Assess King County irrigation water needs. WLRD will conduct a comprehensive, countywide assessment of agricultural water need in King County to better understand current and future demand for agricultural water in King County, and to identify actionable opportunities for addressing this demand in concert with other water needs, including instream flows for salmon recovery. Result from the assessment will help inform longterm	2023	Expected deliverables, including a high-level summary of water rights, a report on agricultural irrigation water use in King County, and a Water Rights 101 factsheet have been completed. Next steps identified by the report include outreach and education about water rights, organizing irrigation interests in the Sammamish Valley around recycled water and policy analysis of additional exempt wells.
	planning related to agricultural production in King County.	2025	Work complete in 2023. See 2023 biennial report.
PREP 2.2.9	Conduct a climate change impacts assessment for agricultural production in King County. The Local Food Initiative will coordinate collection of available scientific information to assess climate change impacts on King County agriculture. The assessment will also identify actions that farmers and King County agricultural programs can take to address climate change impacts,	2023 	Not started, however, study objectives are being integrated into KCD Regional Food Program's new Climate Resilience Strategic Initiative, launching in 2024. Initiative will invest up to \$150,000 annually into projects that support climate resilience in the local agricultural sector. Local Food Initiative staff have recommended to KCD that the investments be framed around four areas of work that correspond to actions that are identified in the SCAP, including understanding the impacts of climate change on food production in King County and identifying best practices for managing impacts. Implementation of the initiative is expected to begin in 2024.

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	helping to sustain a healthy and thriving King County farm economy over the long term.	2025	In 2024, after extensive discussions with stakeholders, DNRP and KCD decided to pivot the Climate Resilience Strategic Initiative. Instead of supporting individual investments, KCD will hire an in-house Climate Special Projects Coordinator with expertise in climate-smart agriculture. The coordinator will serve as a regional leader, collaborating with KCD planners, specialists, local agencies, nonprofits, and farms. The role will focus on integrating climate resilience and regenerative agriculture into land management, developing on-farm test sites, and advancing soil health, biodiversity, and carbon sequestration. The position will be posted by April 1, 2025, with hiring by July 1, 2025.
PREP 3.1.1	Develop and implement an Urban Heat Island Strategy. The Climate Action Team will work with internal and external partners to develop and implement strategies for reducing temperatures and the associated risk of	2023	Strategy is in development (note: now known as the King County Extreme Heat Mitigation Strategy). Project team has been meeting with local communities, subject matter experts, and frontline communities to identify and prioritize draft actions. Strategy is scheduled for completion in June 2024.
	heat-related illness in areas identified as urban heat islands. The strategy will leverage and build on ongoing efforts related to mapping surface temperatures in King County, increasing tree canopy, providing access to green space and open space, and green building.	2025	The King County Extreme Heat Mitigation Strategy was released in July 2024 after consultation with more than 900 individuals. The strategy contains 20 actions to address local heat action, and a King County implementation plan is underway. Implementation has already started on four of 20 actions. A Heat & Health Data Explorer Tool supporting heat data visualization and decision making will be released spring 2025.
PREP 3.1.2	Develop messaging and guidance to prepare equitably for and mitigate climate-related health impacts. Public Health will collaborate with agency and community partners to address gaps in climate and health knowledge and co-develop inclusive and equitable climate and health messaging, resources, and guidance.	2023	Extreme heat risk and wildfire smoke risk communications plans are complete. The Climate Health and Equity Initiative communications plan is in progress. Priority audiences include low income, BIPOC, and limited-English communities, older adults, children, pregnant women, and the unhoused. Priority audiences for additional messaging and guidance development are children (a letter for summer camps, schools, and childcare centers has been drafted), outdoor workers, and homeless service providers.
		2025	In 2024, Public Health partnered with our navigator group, representing priority communities, to co-develop wildfire smoke and flooding messaging. Public Health launched our first community and multilingual media campaigns on these topics alongside our annual extreme heat campaign, with materials translated into up to 20 languages. In 2025, Public Health will run these three campaigns again while continuing to develop and refine climate and health messaging. Additionally, Public Health will conduct a focus group with Khmer community members affected by past flooding to identify communication gaps.
PREP 3.1.3	Account for equity in how Metro creates and shares information about changes in service related to extreme weather events. Metro will work to minimize the impact of weather-related service changes on disproportionately impacted communities by expanding ethnic media connections and pursuing other opportunities to create and share service-related information to these communities.	2023	Work is in progress. Guidelines on how to reach out to ethnic media groups have been completed for six languages. Additional needs include updating ethnic media lists annually and translating bus stop notices into languages other than English and Spanish. New Language Equity Program at Metro getting underway and expected to support implementation of this action. Metro's Public Information Office drafted a blog to help riders prepare for service changes during extreme weather conditions and translated it into nine languages. Translated information regarding service changes was distributed by the transit alert system in nine languages. Curbside real time information signs and website banners were posted in English and Spanish.
		2025	Shared information on Metro's blog regarding staying cool and safe on Metro during periods of high heat with links to cooling center information and more (example). Metro now provides translations in 11 languages. When possible, Metro uses language-neutral icons and graphics on curbside real time information signs to expand language access. Likely to continue blog heat-related messaging as needed during the 2025 summer heat season.
PREP 3.1.4	Design bus stops to account for more extreme weather events, particularly at stops serving communities who may be disproportionately impacted by those events. The Bus Stop Improvements team will develop and incorporate climate change metrics in the process for selecting and prioritizing bus stop shelter improvements. Beginning in 2021, at least 10 percent of the weather-	2023	Work is complete and ongoing. The GIS analysis is complete, highlighting areas of greatest need and heat. Project siting is based on equity metrics and heat indexes with the goal of 10 percent of shelters going into high priority heat areas. Since 2022, 18 bus shelters have been installed, with 16 percent being in high priority heat areas, exceeding the 10 percent goal. Metro is looking into including landscaping into bus stop design. This could include partnering with jurisdictions to plant trees with bus stops. When siting new bus stops, Metro always considers the presence of adjacent tree canopy that might provide summertime shade.

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	related improvements will be constructed at bus stops in climate priority areas.	2025	In 2024, Metro's Bus Stop Improvements program again met the target of installing at least 10 percent of new weather-related improvements in climate priority areas (i.e. areas that experience extreme heat). One particular highlight was the installation of a shelter at a bus stop on S 288th Street in Auburn that serves Thomas Jefferson High School and the surrounding neighborhood. More than 75 riders board the bus at this stop each day and this new shelter is the only shade-providing element on this exposed sidewalk segment.
PREP 4.1.1	Expand the K4C model for collaboration to include climate preparedness topics and issues. The Climate Action Team will partner with K4C to plan and prepare for the impacts of climate change on K4C communities and the King County region. This includes identifying shared climate impact concerns and pursuing opportunities for addressing those concerns.	2023	K4C shared priorities expanded to include climate preparedness. K4C communities participated in development of the King County Wildfire Risk Reduction Strategy (Prep 4.2.7) and the King County Extreme Heat Mitigation Strategy (Prep 3.1.1). K4C members collaboratively worked on identifying shared priorities for Comprehensive Plan climate preparedness policies and are integrating those policies into their Comp Plans as appropriate. Several K4C members now participating in the Puget Sound Climate Preparedness Collaborative.
		2025	K4C established a working group on Climate Equity and Preparedness to develop a list of shared priorities for K4C discussion and action. The group identified wildfire, heat preparedness, and climate resilient infrastructure as key focus areas, and County staff will continue to bring climate preparedness opportunities to K4C on an as-needed basis.
PREP 4.1.2	Strengthen the role of the Puget Sound Climate Preparedness Collaborative in advancing and aligning local and regional climate preparedness efforts. The Climate Action Team will work with other members of the Puget Sound Climate Preparedness Steering Committee to grow and sustain the work of the Collaborative. This includes pursuing financial sustainability for the Collaborative, expanding opportunities to engage with communities about climate preparedness, and addressing key knowledge gaps related to climate preparedness.	2023	Have been successful in growing participation in the Collaborative despite a lack of funding for staff or program support. Monthly meetings and periodic webinars to discuss a variety of climate preparedness topics. Pursuing grants to support program needs.
		2025	Secured a \$2 million federal grant from NOAA to support and expand Collaborative programming. The Collaborative Project Manager was hired March 2025. Grant work getting underway. Includes launching a Small Communities Cohort Program, multiple learning series, convenings on various climate preparedness issues, and developing technical resources.
PREP 4.2.1	Increase coordination around planning for sea level rise in the lower Duwamish. The Climate Action Team will partner with K4C to plan and prepare for the impacts of climate change on K4C communities and the King County region. This includes identifying shared climate impact concerns and pursuing opportunities for addressing those concerns.	2023	Hosting quarterly meetings with the City of Seattle, Seattle Public Utilities, the Port of Seattle, and the Northwest Seaport Alliance. Group is serving as technical advisors and study partners for USGS coastal flood study (Prep 2.2.4) and associated groundwater study. The meetings have also created a forum for coordinating around sea level rise planning associated with Seattle's Climate Resilience District. Drafting Memorandum of Understanding to support ongoing collaboration.
		2025	Quarterly meetings and focus ongoing, as described in 2023. Memorandum of Understanding signed in 2024.
PREP 4.2.10	Develop and Implement a King County Wildfire Smoke Strategy. Public Health, in partnership with the office of Emergency Management, the Climate Action Team, the PSCAA, and King County communities, will develop and implement a strategy for responding to and mitigating the health effects	2023	Strategy is in development. The Risk Communication section has been drafted and staff are currently working on the adaptations and air quality monitoring sections with a goal for completion by the end of 2024. The plan will include actions that other municipalities can take themselves (e.g. code recommendations).
	of wildfire smoke on King County residents with an emphasis on those who are disproportionately impacted by wildfire smoke.	2025	The Wildfire Smoke Health Impacts Mitigation Strategy was completed by PHSKC and released in April 2025. The strategy outlines 14 actions to help reduce population exposure to wildfire smoke. Seven actions identified within the strategy are currently in the process of being implemented at either partial or full capacity, while the remaining seven actions are dependent upon additional funding and resources to support implementation. Implementation of all actions outlined in the strategy will require ongoing support and effort across multiple King County agencies and departments as well as with community, municipal, state, and federal partners.

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PREP 4.2.11	Account for climate change impacts in the Agricultural Land Resource Strategic Plan for the Snoqualmie Valley. WLRD will work with partners to include consideration of climate impacts and resiliency in the Agricultural Land Resource Strategic Plan for Snoqualmie Valley. Doing so will help ensure that future management and infrastructure improvements developed through the strategy account for climate change.	2023	The 25-year Agricultural Land Resource Strategic Plan for Snoqualmie Valley draft will be finalized in Fall 2023. The Plan includes two issue papers specifically focused on climate change (climate projections and invasive species) and four with climate connections (flood safety, home preservation, water rights and irrigation, and population pressure). Actions and strategies identified in Plan will be used to inform decision making by policy makers, farmers, and managers.
		2025	The Snoqualmie Valley Agricultural (Land Resource) Strategic Plan was completed and published October 2024. Implementation of highest priorities for climate change actions began in 2024 and is still in early stages. Grant proposals have been developed by partners Snoqualmie Valley Watershed Improvement District (SVWID) and Snoqualmie Valley Preservation Alliance (SVPA) with support from King County and the Snoqualmie Tribe for water storage/low flow studies. SVPA has also been successful in implementing the first year of Beaverwise (beaver management in ag waterways impacting farms, funded by FCD grant). A pilot project, Basin 1 Pump, by the SVWID with support from KC WLRD (SWS, Ag, FFF, RPU) to provide relief for high priority drainage projects exacerbated by flooding.
PREP 4.2.12	Work with partners to ensure that climate change mitigation and preparedness are incorporated into farm plans and strategies. WLRD will work with partners to help ensure that farm plans include information related to climate mitigation and climate preparedness. This includes incorporating actions to make farms more resilient to climate change and to minimize or offset carbon emissions generated on farms.	2023	Staff are currently focused on ensuring that the plans King County is directly involved in address climate preparedness, though this is not mandatory at this point. KCD, which is primarily responsible for development of farm conservation plans, is considering how to integrate climate change more comprehensively, including in farm plans. Staff are also working to ensure that climate change is accounted for in land that King County manages through actions such as water use reduction and soil health improvements, though currently this work is exclusive to County-owned lands. The public rule amendment for Farm Management Plans is currently on hold, as the Department of Local Services does not have staff capacity to create new rules.
		2025	All farm plans contain Best Management Practices that address climate change. KCD and King County are working on enhancements to farm plans that will ensure they capture regenerative, climate smart agricultural practices more fully. King County has contracted to obtain a template for "comprehensive farm stewardship plans" that fully capture issues related to regenerative and climate smart agricultural practices. Three King County owned farms will serve as pilots for the template, with plans due summer 2025. KCD created a regenerative agriculture specialist position who will serve as the SME for King County with issues related to regenerative/climate smart agriculture; this position will be filled in summer 2025.
PREP 4.2.13	Work with partners to help farmland owners elevate homes within the Snoqualmie River 100-year floodplain and increase access to high ground for animals and equipment during floods. WLRD will work with the Flood Control District, farmers, farmland owners, and other partners to minimize asset risk exposure to flooding. This includes pursuing opportunities to elevate homes	2023	Staff are working to address barriers that slow implementation. The ideal rate of home elevation is four to 10 homes/year; currently, 19 homes have been raised in 20 years. Changes could include direct payment to contractors (versus reimbursing homeowners), creating a sliding scale for reimbursement, and incorporating federal funding (when available). Staff are also working on systematizing the process by determining which homes are at most risk, rather than the current first-come-first-serve system.
	that are vulnerable to flooding, increase access to higher ground for farm animals and equipment, and construct new farm pads, when appropriate compensatory flood storage can be identified and created.	2025	Delayed completion of the Ag Strategic Plan (published October 2024) and RFMS staff changeover have slowed progress. Work is in progress, with focused engagement in March 2025. One Snoqualmie Valley Agriculture Production District home is in queue. Plan prioritization of homes as next steps in 2025-2026.
PREP 4.2.14	Increase interdepartmental coordination related to landside response, reporting, and risk reduction in King County. WLRD will form an interdepartmental landslide hazard committee for the purpose of identifying and updating landslide response roles and resources, increasing public awareness of landslide hazards and preparedness, and updating policies and codes, as appropriate, to address current and projected landslide risks.	2023	Action needs staffing, funding, and an interdepartmental plan to develop and put into practice strategies to plan, respond, report, and reduce risks to landslide hazard areas. Scope can be modified to account for resource needs if able to move forward.
		2025	No change from 2023 update. Staffing resources (including needed technical expertise) and funding could not be secured.

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PREP 4.2.15	Develop and implement a climate change health impact surveillance strategy for Public Health. Public Health will work with partners to develop climate, health and resilience data indicators and surveillance systems for monitoring climate-related health impacts. Information collected through these systems will inform timely public health action and provide a clearer understanding of trends in health status, inequities, and vulnerabilities related to climate impacts.	2023	Eleven climate and health indicators identified for monitoring on an ongoing basis in four domains (extreme weather, air quality, food and waterborne illness, vector borne disease). Once the data are analyzed, indicators will be available in a centralized location for King County staff, the public, and other partners to access. Climate sensitivity and adaptive capacity are aspects of this work that will eventually be integrated.
		2025	A final set of six indicators was launched and <u>displayed on a web-based dashboard</u> in early 2024 (heat and cold related illness, asthma, seasonal allergies, food/waterborne illness, and vector borne illness). These data were first used in partnership with a collaborative of regional hospitals to prepare a climate chapter for their <u>2024 Community Health Needs Assessmen</u> t. Data is being updated annually to stay current and to grow our longitudinal tracking. The next iteration of this work is reflected in a 2025-2030 SCAP action and the 2024-2029 PHSKC Strategic Plan, as it continues to evolve.
PREP 4.2.2	Expand the use of recycled water in the Sammamish Valley to help mitigate projected changes on summer low streamflows. WLRD will work with partners to explore if changes in flow management at Howard Hanson Dam on the Green River could be utilized to ameliorate the expected impacts of climate change, while meeting operational and regulatory expectations.	2023	A study has been conducted in collaboration with the Washington Water Trust regarding the safety of using recycled water for irrigation, specifically in the context of specific chemicals that can remain in recycled water. This study is awaiting review by a toxicologist and should wrap up by the end of 2023. Also researching options for expanding recycled water use in the Sammamish Valley. Made progress in establishing relationships with farmers and an existing customer is expanding their use.
	Adjustments could include changing the timing of releases or the depth of release from the reservoir to help address high summer temperatures in downstream reaches.	2025	The final research report for the Sammamish Valley demonstration study was completed in 2024. WTD is pursuing limited expansion where feasible and appropriate to properties in the Sammamish Valley that are using surface water or well water. Future expansion will be directed by the Regional Wastewater Services Plan update, which is expected to be complete by 2029.
PREP 4.2.3	Work with partners to explore changes in regulated streamflow management for the Green River to account for climate impacts on salmon. DNRP-WLRD will work with partners to explore if changes in flow management at Howard Hanson Dam on the Green River could be utilized to ameliorate the expected impacts of climate change, while meeting operational and regulatory expectations. Adjustments could include changing the timing of releases or the depth of release from the reservoir to help address high summer temperatures in downstream reaches.	2023	The Army Corps of Engineers (ACOE) launched a "Forecast Informed Reservoir Operations" (FIRO) study in October 2021 to integrate additional flexibility in reservoir management based on improved weather and water forecasts but the study was delayed due to COVID. Work is getting underway, however, and has added significance with the planned installation of fish passage at Howard Hanson Dam. King County staff will be monitoring the study and advising where appropriate. Additionally, King County staff received a grant to begin 2D flow modeling of the middle Green River to assess what levels of flow create the most habitat for juvenile chinook. That study should inform annual flow management decisions as well as the planned fish passage project and will be completed in 2024.
		2025	ACOE's FIRO process was delayed, but has recently kicked off in earnest. A technical advisory group started meeting in early 2025. WLRD is participating. The group is currently working on defining metrics to measure the project's effectiveness. It is unclear if federal budget issues will impact this project. The 2D flow model is built and waiting for completion of fish habitat submodel. A draft approach based on Green River fish data on how to value fish habitat within the model has been developed. Waiting on stakeholder input on draft fish habitat submodel to run the larger model. Expect work to be completed this year.
PREP 4.2.4	Partner with major landowners and land managers to better understand and enhance the role upper watershed forests in reducing climate change impacts on salmon. WLRD will partner with WRIA teams, the Rural Forest Commission, major forest landowners and land managers to assess the benefits of upper watershed forests for salmon recovery and habitat	2023	Initial scoping in progress. Looking to do a literature review in 2024 and build out approach from there pending funding. Action ties into several related projects, including the Snoqualmie Tribe's Upper Snoqualmie Resilient Corridor Plan, new federal investments in fish passage at Howard Hanson Dam (opens new fish habitat in the upper Green River above the dam), and County interest in creating old growth corridor(s). Likely focus for this action is the upper Green River watershed due to new fish passage investments.
	restoration in a changing climate, and recommend strategic approaches for maximizing those benefits.	2025	Science Section completed a literature review in Q1 2024. Landowner engagement is occurring in Upper Green River. Upland forest conservation highlighted in Comp Plan update. Not clear if further work likely pursuant to this SCAP action.
PREP 4.2.5	Work with partners to update the Wildlife Habitat Network to include and enhance habitat connectivity needs related to vulnerable species and habitats in King County. WLRD will work with partners to update the Wildlife Habitat Network to account for and enhance climate change-related habitat	2023	A complete reanalysis of habitat linkages is needed, which is beyond the initial scope of an update to the Wildlife Habitat Network (WHN). Staff have identified potential funding sources that may support getting the work done in 2024.

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	connectivity needs for vulnerable species and habitats in King County. Results from the assessment will support regional efforts related to open space management, land acquisition, and habitat restoration.	2025	In lieu of editing the WHN, staff will be developing a second map showing added connectivity for use by the LCI team and others in WLRD who work to acquire land for conservation. Staff will be getting data from WA Dept of Fish and Wildlife this year to help create the maps. A team will then be formed to determine how to move forward in refining the data into useful maps. This work is the focus of a 2025 SCAP action for climate preparedness.
PREP 4.2.6	Work with King County programs and regional partners to evaluate and support the use of beaver as an adaptation strategy for addressing hydrologic change, where appropriate. WLRD will evaluate the use of beaver as an adaptation strategy for addressing climate change impacts on water quality, streamflow volume, and riparian habitat, and develop recommendations on how and where beaver can be strategically incorporated into a climate change response to hydrologic change. Project staff will also work with other County programs and regional partners to support and enhance those benefits, where appropriate.	2023	Beaver dam analog (BDA) sites in the Upper Green Watershed have been identified and finalized. Currently focused on getting pre-BDA hydrologic monitoring in place and started. A Year 1 Report will be generated in 2025, and it is expected that the BDAs will go up in 2026.
		2025	This project was ended after a vote of the landowners to not allow project staff to install BDAs on their lands in the Upper Green River Watershed. Grant closeout in progress. Staff plan to write a final report before the end of 2025 to document observations and recommendations. In course of the work, staff learned that beavers may have a type of life history in upper elevations that has not been described or at least widely recognized whereby they do not build dams. Staff found beavers living in places with no dams/failed dams.
PREP 4.2.7 Develop a King County Wildfire Risk Reduction Strategy. OEM will partner with King County communities, fire districts, and other organizations to develop an integrated King County strategy for wildfire. The strategy will review current efforts to address wildfire risk in King County and develop recommendations for addressing identified gaps and opportunities.	2023	Strategy released in July 2022. Strategy was co-developed with local jurisdictions, fire departments, and forest ecologist. Strategy implementation roundtable hosted July 2023. King County Emergency Management is rolling out Ready, Set, Go with KCSO, and creating shared language with neighboring counties for evacuations.	
	recommendations for addressing identified gaps and opportunities.	2025	King County staff hosted implementation roundtables in summer 2023 and 2024. The Strategy informed update of new wildfire section in 2024 Comprehensive Plan update. A Community Wildfire Protection Plan is in development.
PREP 4.2.8	Develop guidelines for sourcing tree seedlings to help forest planting practices account for climate change. WLRD will convene forestry practitioners and academics to discuss adapting forest planting practices to account for climate change, and develop a state of the science paper on assisted migration in the PNW with specific recommendations for tree planting that can be used to inform forest planting decisions by King County, small private forest landowners, and others.	2023	Staff are conducting a pilot study at four sites in King County using seeds of selected tree species from southwest Oregon and northwest California, areas identified to have similar climate conditions (currently) to those projected for this region in 30 to 50 years. Plantings are expected to begin in 2024/2025, with 10 years of maintenance and monitoring to support the pilot study. An official policy will follow based on the outcomes of the monitoring. Work on guidance for all forest landowners in King County has not begun although landowners are advised to consider future climate when developing forest stewardship plans.
		2025	Used USFS Seed Selection Tool to identify appropriate geographic regions to source seed for trials. Species selected, multiple seed sources identified, seed purchased, and contract for seedling production from local growers executed. Planting and monitoring protocols were developed to align with other seedling trials in the region. Four pilot projects planted March 2025. Initial results will be available in five years.
PREP 4.2.9	Ensure that all forest plans developed and approved by King County and partners account for climate change. WLRD of DNRP will work with public and private forestland partners to ensure that all forest plans developed and/or approved by King County include strategies to minimize risk from climate change. This applies to forest stewardship plans developed to guide management of King County-owned forest lands as well as forest plans developed for private forest landowners who want to enroll in Public Benefit Rating System and other Current Use Taxation program.	2023	Sixty to 70 forest stewardship plans are approved by King County on an annual basis (roughly half of the overall demand). All new and revised stewardship plans that require DNRP approval now include specific actions to enhance climate resilience.
		2025	No update required on this action. Work complete as of 2023 update.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
PREP 5.1.1	Incorporate information on changing flood risk and ways to reduce that risk into outreach for coastal and river floodplain property owners. WLRD will develop and integrate information about climate change impacts on flood risk and floodplain management into its communications and engagement activities, helping to build greater public understanding of how climate change affects river and coastal flooding and capacity for resilience to current and future flood risk.	2023	King County staff are looking to integrate information on changing flood risk into communications process maps that guide staff communications practices and content. Messaging about climate change is being included in the Flood Hazard Management Plan and related communications. The Phase III Flood Study will provide more basin-specific information that can be utilized in communications when completed (2024). Staff capacity for communications is an ongoing concern. The Flood Hazard Management Plan was completed (and approved by Council) in 2024. Phase III of the Climate Impacts Group report is in progress and on track to be completed before December 2025. Updated talking points for climate impacts on King County rivers are dependent on the Climate Impacts Group report completion and will make it possible to incorporate into day-to-day outreach
PREP 5.1.2	Increase outreach and engagement related to sea level rise on Vashon-Maury Island. WLRD will work with internal and external partners to increase outreach and engagement related to sea level rise on Vashon-Maury Island. This includes incorporating information on sea leave rise into ongoing engagement work like the like Shore Friendly and DLS's once a week Vashon	2023	and communication. Work on this action has been constrained due to financial and labor constraints. This action may move faster pending completion of USGS coastal floodplain modeling (Prep 2.2.4) and improving permitting guidance related to sea level rise and bulkheads (Prep 1.2.2).
	permit office. The Division and its partners will also seek opportunities for more focused discussions on sea level rise, including, for example, public workshops specifically focused on sea level rise.	2025	Work has been on hold pending completion of the USGS coastal floodplain modeling described in Prep 2.2.4 and a sea level rise assessment for Vashon and Maury Island that is scheduled for completion in summer 2025. USGS modeling work was delayed by server crash that required re-running analysis. An outreach plan will be developed in late 2025/early 2026 and implemented as part of 2025 SCAP work related to developing a sea level rise strategy for King County.
PREP 5.1.3	Develop and implement a holistic stormwater and climate change communications strategy for use by King County and community partners. WLRD will develop and implement a stormwater/climate change communications strategy as part of Stormwater Service's Strategic Communications Plan for use by the County and partner jurisdictions that	2023	Stormwater Outreach for Regional Municipalities (STORM) will recruit for a climate action work group at the annual Symposium to consider a regional public information and engagement strategy. Work on a climate outreach/engagement public information campaign for stormwater, inclusive of audience research and testing, has not been developed yet. Incorporating climate preparedness into a stormwater communications strategy will begin with understanding and communicating environmental health impacts. Puget Sound Starts Here program will begin connecting climate change to clean water outreach.
	emphasizes the health, safety, and ecological benefits of a climate-resilient stormwater management program.	2025	In 2024 Stormwater Services Section was assigned a NextGen Climate intern. The intern designed an information approach to test with audiences that linked healthy communities to healthy habitat called Clean Water Connects Us All. That approach was rolled out at a summer campaign and at DeafNation , that included ASL interpreted interviews on green jobs, climate, disability access for jobs, and stewardship. An ethnic media tour was a show & tell of stormwater infrastructure, highlighting opportunities for the public to guide public investments and plan for climate change. A re-recruitment for partners to research and test climate messaging is planned. Anecdotal feedback from ethnic media representatives was interest in stormwater processes and information communities are not aware of. The hope is that 2025 will have progress on message testing and research.
PREP 5.1.4	Increase technical assistance related to wildfire. WLRD Program will work with partners to ensure that public and private forestlands within the wildland/urban interface are managed to be as adaptable as possible in the face of a changing climate. This includes expanding the incorporation of "Figure 2" prostices parents a range of scales (individual barres to	2023	Action includes three primary areas of work: 1) direct technical assistance to forest landowners via dedicated segments in Coach Planning classes for developing forest plans, field days, and landowner education; 2) hiring a staff member who will dedicate half of their time to wildfire risk reduction issues, and 3) reducing regulatory challenges that private landowners face implementing actions in forest stewardship plans reducing wildfire risk (proposed for 2024 Comp Plan update).
	"Firewise" practices across a range of scales (individual homes to communities) and supporting the development of clear plans for wildfire response, community evacuation and wildfire disaster recovery.	2025	Revised the scope of work for a vacant position to create a position focused on wildfire risk reduction; position filled June 2024. All forest stewardship plans reviewed/approved by DNRP address climate change and wildfire risk. Continued to advocate for changes to King County building code to allow implementation of wildfire risk reduction actions in wildland-urban interface areas with no/minimal permitting required; code changes adopted December 2024. King County will track private landowner actions under the revised clearing and grading code.
PREP 5.1.5	Incorporate information on climate change impacts and action into Parks communications materials and other engagement activities. King County Parks will incorporate information on climate change impacts and	2023	Climate change is incorporated into communications for the 3 Million Trees Initiative, forestry, natural lands, and operations. Exploring opportunities to integrate into capital planning-related communications and in levy-related information.

Action #	2020 SCAP Priority Action Description	Status	Additional Information
	preparedness, as well as the division's role and actions to address those challenges, into ongoing communications and engagement activities. This may include, for example, incorporating information into web content, social media postings, printed materials, and presentations; developing on-site informational and interpretive signage; and sharing information through community engagement processes.	2025	Climate change information continues to be incorporated into Parks' messaging as noted in the 2023 update. Significantly, the next iteration of the Parks Levy (2026 – 2031, to be considered by voters in Aug. 2025) includes "climate resilience, conservation, and stewardship" as a key investment category. Public engagement in 2024, and ongoing outreach about the next levy, will continue to highlight this important benefit of Parks' work.
PREP 5.1.6	Support increased farmer participation in federal disaster insurance programs. WLRD will work with partners to raise producer awareness of Federal agricultural disaster relief programs that can help reduce the economic consequences of crop loss. This work will also assist farmers with	2023	Work is focused on raising awareness among small specialty crop farms about federal crop assistance programs and reducing barriers to participating. Currently only one farm of every 2,000 participates. Supporting materials being developed; workshops planned for 2024. Supporting materials will be translated, and there will be targeted outreach for immigrant/refugee farmers.
	program enrollment if it is deemed to be an appropriate business decision.	2025	Coordinated USDA Farm Service Agency (FSA) presentation about program availability to King County Agriculture Commission. FSA has removed some obstacles to FSA program enrollment, which may reduce barriers to participation in crop insurance programs by specialty crop farmers
PREP 5.1.7	Conduct trainings for partner jurisdictions on climate change and hazard mitigation. The Office of Emergency Management will host trainings with partner jurisdictions on incorporating climate change into hazard mitigation. The trainings will include information on how climate change affects natural hazards in King County; how to evaluate and adjust hazard mitigation strategies to account for climate impacts, including the potential for	2023	Presentation for partner jurisdictions complete, with kickoff planned for fall 2023. Extreme weather has been incorporated into summer and winter seminars for partner agencies and jurisdictions, with plans to continue this work. Update of the Regional Hazard Mitigation Plan in 2024 will build on existing climate change information to include updates to hazard specific profiles (such as extreme weather, flood, wildfire) and integrating the compounding impacts of climate change on those hazards. The mitigation plan update process will include educational components (workshops) and partner meetings.
	disproportionate impacts on frontline communities; and best practices for sharing information about climate risks with the public.	2025	The 2025 Regional Hazard Mitigation Plan (RHMP) is in the process of being federally approved by September 30, 2025. The plan takes into consideration the impacts of climate change on all hazards identified in the county. The plan also provides strategies on how the county can best mitigate those hazards. As part of the plan update process, OEM lead several workshops on how climate change will affect all 14 hazards identified in the plan. This work will continue during the lifecycle of the 2025 RHMP.

2020 SCAP Performance Measures Summary

Tracking performance measures is essential to evaluating King County's progress toward its climate commitments and ensuring accountability across multiple sectors. In the 2020 SCAP, sections such as Greenhouse Gas (GHG) emissions reduction and Preparing for Climate Change (PREP) each used distinct performance frameworks, making it more challenging to evaluate overall progress consistently. The GHG section uses outcome-based indicators to track progress toward countywide emissions reduction targets. By contract, the PREP section, assesses implementation progress based on the percentage of the 69 climate preparedness actions that meet each performance goal, rated as "on track," "partly on track," or "not on track." This difference reflects two distinct approaches to measuring climate action: one focused on achieving long-term emissions outcomes, and the other on advancing specific climate resilience actions.

The following tables illustrate these two approaches:

• Table 4. 2020 Greenhouse Gas Performance Measures

Performance ratings for GHG-related measures show steady progress between 2023 and 2025. In 2023, most measures were rated Green (16), with 10 Red ratings, 8 Yellow ratings, and 2 listed as not applicable (n/a). By 2025, Green ratings remained stable at 16, Red ratings decreased from 10 to 7, and the number of not applicable measures increased to 5. While Yellow ratings held steady at 8, the decrease in Red ratings suggests improvements across several areas, reflecting King County's continued efforts to strengthen GHG performance outcomes over time.

• Table 5. 2020 Climate Preparedness Performance Measures

The data reflects strong momentum from 2023 to 2025, with clear shifts toward higher rates of "On track" performance. The average percentage of activities rated "On track" rose from 57 percent to 83 percent, while "Partly on track" ratings fell significantly from 38 percent to 11 percent. The share of activities rated "Not on track" remained steady at about six percent, highlighting both notable progress and areas requiring continued attention.

As part of the more strategic and integrated approach taken in the 2025 SCAP, King County updated its performance measurement framework to better align evaluation methods across all focus areas. In this transition, both the draft Strengthening Resilient Frontline Communities (SRFC) measures piloted in the 2023 Biennial Report and the 2020 PREP measures were retired. The 2023 Biennial Report marks the final reporting of the 2020 PREP performance measures, with future progress now fully tracked under the updated 2025 framework. (Note: The draft SRFC measures were note adopted and are not reported here.)

The tables below provide detailed information about each performance measure established by King County in its 2020 SCAP, organized by key sections addressing climate action priorities. Similar to the previous section on priority actions, the tables in this section use the following performance ratings:

Performance Rating	Definition
Red	Course correction needed or stopped
Yellow	Some risks
Green	On track

Table 4. 2020 GHG Performance Measures

#	Performance Measure	2023 Status	2025 Status
GHG 01	Countywide GHG Emissions. Reduce countywide sources of GHG emissions, compared to a 2007 baseline, by 25 percent by 2020, 50 percent by 2030, and 80 percent by 2050. Pursue additional goals and actions to sequester carbon and reduce emissions from consumption of goods and services.	11 percent increase (2022)	Four percent increase (2023)
GHG 02	Operational GHG Emissions. King County shall reduce total GHG emissions from government operations, compared to a 2007 baseline, by at least 25 percent by 2020, 50 percent by 2025, and 80 percent by 2030.	25 percent reduction (2022)*	24 percent reduction (2023)
GHG 03	Transit Ridership. Increase annual passenger boardings on transit services in King County, including Metro Transit and Sound Transit, to • 231 million annual passenger boardings by 2025 • 269 million annual passenger boardings by 2030 • 378 million annual passenger boardings by 2040	101.3 million annual passenger boardings (2022)	129.6 million annual passenger boardings (2024)
GHG 04	Car Trips. Reduce total VMT for passenger vehicle and light trucks by: 20 percent below 2017 by 2030; 28 percent below 2017 levels by 2050	Seven percent below 2017 (2022)*	Five percent below 2017 (2023)
GHG 05	Land Use. At least 98.5 percent of new countywide residential construction inside the Urban Growth Area (UGA), as proposed in Vision 2050.	99.2 percent (2022)*	99.1 percent (2023)
GHG 06	Regional Trails. By 2025, increase the number of new regional trail miles constructed: • 10 miles of new paved or soft-surfaced interim regional trails completed; • three critical crossings (bridges or other critical crossings) completed; and • two intermodal/community to the regional trails system completed.	6.7 miles completed (2022)	14.4 miles completed (2025)

GHG 07	Clean Fuels. Reduce transportation fuel GHG emissions intensities by at least 20 percent by 2030, compared to 2017 levels	Three percent reduction in on-road transportation emissions (2022)*	Two percent reduction in on-road transportation emissions (2023)
GHG 08	Electric Vehicles. Increase percentage of new vehicles sold that are electric vehicles: • 100 percent of light duty vehicles by 2035; • 50 percent of medium duty by 2035, and • 28 percent of heavy duty by 2035.	24 percent of light duty vehicles (2022) 21 percent of all vehicles (2022)	31 percent of light duty vehicles (2024) 27 percent of all vehicles (2024)
GHG 09	GHG Emissions from County Fleet Vehicles. In its vehicle operations, King County will reduce GHG emissions by 45 percent by 2025 and 70 percent by 2030, compared to a 2017 baseline.	19 percent reduction (2022)*	15 percent reduction (2024)
GHG 10	Electrify County-Owned Vehicle. Consistent with Ordinance 19052, increase percentage of County-owned vehicles that are electric vehicles, including: ● 100 percent zero-emission revenue bus fleet by 2035; ● 50 percent of light-duty vehicles transitioned to electric by 2025 and 100 percent by 2030, and ● 150 electric vehicle chargers installed at County facilities by 2030.	15.3 percent of bus fleet (2022) 2.2 percent of light-duty vehicles (2022) 129 chargers and 177 charging ports installed at County facilities (2022)	15.8 percent of bus fleet (2024) 4.1 percent of light- duty vehicles (2024) 136 chargers and 193 charging ports at County facilities (2024)
GHG 11	Energy Use in Existing Buildings. Reduce energy use in all existing buildings in King County by 25 percent by 2030 and 45 percent by 2050 compared to a 2017 baseline.	7.57 percent reduction in 2020, compared to 2017.	5.84 percent increase in 2023, compared to 2017.
GHG 12	Fossil Fuel Use in Buildings. Strengthen conservation and use of RNG, and support the transition to electrical systems to reduce fossil-based natural gas and other fossil fuel use in existing buildings in King County by at least 20 percent by 2030, 50 percent by 2040, and 80 percent by 2050, compared to a 2017 baseline.	Three percent increase (2022)*	11 percent increase (2023)

GHG 13	Clean Electricity. Implement the Washington	38.8 percent	53.5 percent clean
0110 13	State Clean Energy Transformation Act, which	clean electricity	electricity (2023)
	phases out coal-fired electricity sources by	(2022)*	cicetricity (2023)
	2025 and requires 80 percent carbon neutral	(2022)	
	electricity by 2030, and 100 percent clean		
	electricity by 2045; increase countywide		
	renewable electricity supply to 90 percent,		
	limit construction of new natural gas based		
	electricity power plants, and seek to establish		
	a more resilient energy system, supporting		
	targets that seek increased supplies of		
	distributed generation, storage, and demand-		
	side conservation: • New distributed		
	generation (solar): 10 MW/year beginning in		
	2020, reaching 100 MW countywide by 2030		
	and 250 MW countywide by 2045. • Energy		
	storage: 100MW per utility serving King		
	County by 2030 and 200 MW per utility by		
	2045. • Demand response technologies: >five		
	percent of peak utility load by 2030, >10		
	percent of peak utility load by 2045.		
GHG 14	Energy Use in County Facilities. King County	8.8 percent	10.4 percent
	will reduce normalized* energy use in	reduction	reduction (2023)
	County-owned facilities by at least 12.5	(2022)*	
	percent by 2025 and 17.5 percent by 2030		
	(2014 baseline).		
GHG 15	Fossil Fuel use in County Buildings. By 2030,	60 percent	47 percent increase
	20 percent reduction in fossil fuel use in	increase (2022)*	(2023)
	existing County buildings; by 2040, a 50		
	percent reduction; by 2050, an 80 percent		
	reduction, baseline 2014		
GHG 16	Renewable Energy Consumption. King	72 percent from	77 percent from
	County government shall consume renewable	renewable	renewable sources
	energy equal to 80 percent of government	sources (2022)	(2023)
	operation facility energy consumption by		
	2025 and 95 percent by 2030.		
GHG 17	Solar Energy Production. King County	760 kilowatts DC	1214 kilowatts DC
	agencies shall have 1.5 or more megawatts	(2022)*	(2024)
	(1,500 kilowatts DC) of solar energy installed		
	at its facilities by the end of 2025.		
	I .		

GHG 18	Energy Code Improvements. Implement	58 percent	See 2023 update. No
	Washington State Energy Code, which	energy reduction	new data yet
	requires newly constructed buildings to move	in residential	available
	toward incrementally stronger efficiency	(2021)	
	performance, including a 70 percent energy	47 percent	
	reduction and net-zero GHG emissions in new	energy reduction	
	buildings by 2031.	in commercial	
		(2021)	
GHG 19	Green Building Performance / Certifications.	37.5 percent of	See 2023 update. No
	By 2025, 75 percent of new residential	new residential	new data available.
	dwelling units achieve: Built Green 4 Star or	dwelling units	
	better, high level Evergreen Sustainable	(2022)	
	Development Standard, LEED Gold, or Petal,		
	Zero Energy, Zero Carbon, CORE, or Passive		
	House Certification. By 2030, 100 percent of		
	new residential dwelling units achieve: Built		
	Green 4 Star or better, high level Evergreen		
	Sustainable Development Standard, LEED		
	Gold, Petal, Zero Energy, Zero Carbon, CORE,		
	or Passive House Certification. By 2035, 50		
	percent of new residential dwelling units		
	achieve, in equal portions, Built Green		
	Emerald Star, LEED Platinum, Living Building		
	Challenge, or equivalent green building		
	certification.		
GHG 20	C&D Materials Recycling Countywide. By	Data not	Data not available
	2025, achieve an 85 percent C&D materials	available	
	diversion rate from building development		
	sites across King County, excluding Seattle		
	and Milton. By 2030, achieve zero waste of		
	C&D materials resources with economic		
	value.		
GHG 21	Capital Project Performance / Certifications.	89 percent of	95 percent of
0110 21	By 2020 and each year thereafter, 100	County capital	County capital
	percent of County capital projects achieve	projects (2022)	projects (2024)
	Platinum certification using LEED or	projects (2022)	projects (2024)
	Sustainable Infrastructure Scorecard or		
	better. By 2030, 100 percent of King County		
	new construction and whole building		
	renovation projects achieve certifications		
	that demonstrate a net zero GHG emissions		
	footprint (using International Living Future		
	Institute Zero Energy, Living Building		
	Challenge, Energy Petal, or Zero Carbon		
	certification or U.S. Green Building Council		
	<u> </u>		
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	LEED Platinum plus Zero Energy or Zero Carbon certifications).		

GHG 22	C&D Materials Recycling Operations. Minimum 80 percent C&D materials diverted from landfills from County capital projects; 85 percent diversion by 2025, and zero waste of resources with economic value by 2030.	80.3 percent diverted (2022)	91.2 percent diverted (2024)
GHG 23	ess in Capital Project.: One hundred percent of capital projects use King County ESJ credits. Opportunities to achieve these credits include implementing ESJ plans, realizing ESJ priorities, and advancing economic justice opportunities.	90 percent of capital projects (2022) 24 percent of completed projects realized ESJ priorities (2022)	90 percent of capital projects (2024) 33 percent of completed projects realized ESJ priorities (2024)
GHG 24	Water Use. Five percent reduction in potable water use by 2025, and 10 percent reduction by 2030 compared to 2020 baseline.	12 percent increase in potable water use (2022)	Data not available
GHG 25	ZE / LBC Projects. By 2025, King County will identify and will make substantial progress in the design, construction or certification process for at least 20 projects pursuing International Living Future Institute Zero Energy; Living Building Challenge, Energy Petal, or Zero Carbon; or U.S. Green Building Council LEED Platinum plus Zero Energy or Zero Carbon certifications; or comparable carbon neutral performance. This will be approximately 50 percent of applicable projects that are projected to be completed by 2025. By 2030, 100 percent of completed projects will achieve net zero GHG performance.	13 projects (2023)	15 projects (2024)
GHG 26	Zero Waste of Resources. By 2030, zero waste of resources that have economic value for reuse or recycling.	67 percent of waste disposed in landfills that could be reused or recycled (2022)	67 percent of waste disposed in landfills that could be reused or recycled (2024)

GHG 27	Zero Food Waste. By 2030, zero food waste is disposed of in Cedar Hills landfill.	11 percent reduction (2022)	14 percent reduction (2024)
GHG 28	Transfer Station Recycling. By 2025, recycle 60,000 tons of key materials including yard and wood waste, metal, cardboard, and paper at King County-owned recycling and transfer stations.	35,000 tons of material recycled (2022)	32,000 tons of material recycled (2024)
GHG 29	Paper Use. Compared to 2015 levels, reduce copy paper usage by 40 percent by 2025.	65 percent reduction (2022)	70 percent reduction (2024)
GHG 30	Forests & Natural Areas Protected. In alignment with LCI targets, protect 1,300 acres of forestland and natural area annually through fee, easement, and incentive programs. The five-year target through 2025 is 6,500 acres total. It is estimated that of the 1,300 acre annual target, ~1,000 acres will be achieved through fee/easement and ~300 acres through the Public Benefit Rating System (PBRS)/Current Use Taxation (CUT) program.	2,500 acres (2020-2022)	4,700 acres (2020- 2024)
GHG 31	Equity Area land Acquisitions / Investments. Invest \$25 million to improve public access to green space in equity open space opportunity areas (defined by health, income, and park access metrics), including at least five properties acquired annually across the county (25 by 2025). Provide enhanced land access opportunities for immigrant, refugee, and underrepresented communities in south King County.	11 opportunity areas - \$13.5 million invested (2020-2022)	25 opportunity areas - \$29.69 million invested (2020-2024)
GHG 32	Climate Considerations / Stewardship Plans. By 2021, all forest and farm stewardship plans approved by King County will include specific actions to enhance carbon sequestration and improve climate resilience.	100 percent plans (2022)	100 percent plans (2024)

GHG 33	Forest & Farm Stewardship Plans. By 2025, 100 percent of Parks' forested sites larger than 200 acres (~32 sites) have Forest Stewardship Plans and all County-owned farms have stewardship plans developed and implemented that include climate-friendly and regenerative farm practices.	26 out of 32 sites have plans in progress (2022)	29 out of 29 priority sites have plans (2024)
GHG 34	Native Trees Planted on KC Property. Plant 500,000 native trees on King County-owned and managed properties by 2025 to improve forest health and enhance future carbon sequestration potential.	202,300 native trees planted (2021-2022)	380,200 native trees planted (2021-2024)
GHG 35	Acres Restored: Restore 2,000 acres of forests and natural areas on Parks-managed properties by 2030 to improve climate change resiliency and enhance potential for carbon sequestration. This will double King County's recent forest and open space restoration pace.	495 forest acres (2021-2022)*	890 forest acres (2021-2024)
GHG 36	Tree Canopy / White Center & Skyway. Increase tree canopy above baseline in unincorporated urban King County with lowest coverage (White Center and Skyway) measured as part of 30-Year Forest Plan	Data not available	Data not available

^{*} Denotes where data has been updated since the 2023 Biennial Report.

Table 5. 2020 Climate Preparedness Performance Measures

The 2025 SCAP includes an updated climate preparedness performance measurement framework based on the section's new focus area topics. The new framework replaces the 2020 measures below. This is the last reporting of these measures.

#	Performance Measure	2023 Status	2025 Status
Prep 1	King County policies, plans, practices, and	69 percent on track	85 percent on track
	procedures require consideration of	27 percent partly on	13 percent partly on
	climate impacts, where relevant, as part	track or early stage	track
	of decision processes. By 2025, King	Four percent not on track	Two percent not on
	County programs have successfully		track
	updated the policies, plans, practices, and		
	procedures identified in the 2020 SCAP		
	climate preparedness priority actions. By		
	2030, King County programs have		
	identified and updated remaining relevant		
	policies, plans, practices, and procedures.		
Prep 2	King County is accounting for climate	53 percent on track	88 percent on track
	impacts in decision processes and	44 percent partly on	12 percent partly on
	implementing climate resilient actions.	track or early stage	track
	King County programs are making	Three percent not on	
	progress on clearly articulating if and how	track	
	climate change affects a planned course of		
	action, adjusting those decisions to		
	account for climate impacts, and		
	ultimately implementing climate resilient		
	decisions.		
Prep 3	SCAP climate preparedness actions are	34 percent on track	82 percent on track
	achieving their expected outcomes. 100	64 percent partly on	10 percent partly on
	percent of actions are delivering on	track or early stage	track
	expected outcomes.	Four percent not on track	Eight percent not on
			track
Prep 4	King County staff are accessing and	63 percent on track	78 percent on track
	applying relevant research, data,	35 percent partly on	14 percent partly on
	guidance, and other technical	track or early stage	track
	information related to climate impacts	Two percent not on track	Eight percent not on
	and climate preparedness. King County		track
	staff report knowing where to find		
	relevant climate information and technical		
	guidance and can apply that information		
	in decision making.		
Prep 5	King County is funding or otherwise	73 percent on track	79 percent on track
	pursuing the technical information and	14 percent partly on	12 percent partly on
	research needed to inform climate-	track or early stage	track
	resilient decision making and sharing that	14 percent not on track	Nine percent not on
	technical information with others. King		track
	County is making progress on identifying,		

	funding, and/or participating in the		
	development of research and technical		
	assessments, and sharing what we are		
	learning from that work.		
Prep 6	Health and equity are being prioritized in	50 percent on track	96 percent on track
11000	climate preparedness actions and	50 percent partly on	Four percent partly
	activities. King County programs are	track or early stage	on track
	making progress on (1) developing and	and an early stage	
	implementing climate preparedness		
	actions specifically focused on addressing		
	climate equity and health disparities, and		
	(2) including targeted efforts related to		
	climate equity and health disparities in the		
	development and implementation of all		
	climate preparedness activities.		
Prep 7	King County is building and/or supporting	74 percent on track	92 percent on track
	the collaborations and partnerships	26 percent partly on	Four percent partly
	necessary to make progress on climate	track or early stage	on track
	preparedness outcomes and improving		Four percent not on
	regional resilience. King County programs		track
	are building and sustaining collaborations		
	and partnerships related to climate		
	preparedness, and those collaborations		
	and partnerships are resulting in progress		
	on preparedness priorities.		
Prep 8	King County staff have the tools,	39 percent on track	55 percent on track
	resources, and information needed to	38 percent partly on	18 percent partly on
	support increased outreach, engagement,	track or early stage	track
	and technical assistance about climate	23 percent not on track	27 percent not on
	change with the communities they serve.		track
	Staff involved in outreach, engagement,		
	and technical assistance activities at King		
	County report having the tools, resources,		
	and information needed to support		
	deeper integration of climate change in		
	that work.		
Prep 9	King County programs are creating	60 percent on track	90 percent on track
	diverse opportunities for residents to	40 percent partly on	10 percent partly on
	learn about climate impacts and climate	track or early stage	track
	action in King County. King County		
	programs are sharing information about		
	climate change with residents and related		
	measures of effectiveness.		

2020 SCAP Major Expenses Summary

The implementation of the 2020 SCAP included the following major expenses associated with the following:

Community-scale Emissions Inventories:

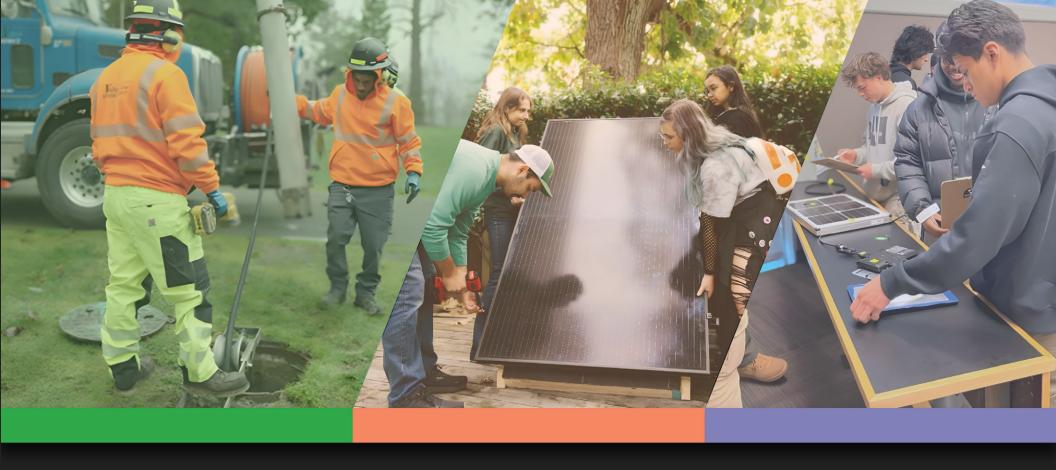
Major expenses were approximately \$225,000 for the 2019/2020 and \$170,000 for the 2022/2023 geographic and consumption-based inventories and wedge analyses.

Climate Change Community Engagement:

- Expenses were approximately \$130,000 for the Climate Equity Community Task Force consultation compensation and related events
- Expenses for the Climate Justice Learning Series totaled \$82,000
- Expenses for the implementation of the Community Climate Resilience Program totaled \$120,000

Climate Change and Energy Efficiency Partnerships with Businesses and Cities:

- Major expenses were approximately \$70,000 for community engagement, surveys, strategy design, and industry sector analysis in developing the 2023 Green Jobs Strategy.
- Expenses for implementing the green jobs strategy, including community engagement campaigns, application clinic workshops, the 2023 and 2024 Green Jobs Green Futures Summits, and paid work-based learning opportunities to connect young people to career on-ramps in the clean energy sector totaled approximately \$150,000
- King County contributes \$10,000 a year to the K4C as the K4C Interlocal Agreement Defined Contribution. In addition, King County contributes approximately \$50,000 -\$75,000 of staff time per year to support the K4C. For more information on K4C dues and shared expenses, see the annual K4C Work Plan and Budget.



KING COUNTY CLIMATE AND WORKFORCE STRATEGY



2025



ACKNOWLEDGMENTS

King County thanks residents and partners for guiding this plan and staff and community members not listed who contributed.

PROJECT MANAGERS - EXECUTIVE CLIMATE OFFICE

Michael Carter / King County Climate and Workforce Manager

Anoushka Adhav / King County Climate and Workforce Project Manager

LOCAL ORGANIZATIONS

CleanTech Alliance

Emerald Cities Collaborative

EnviroStars Business Network

Seattle College Wood Technology Center

Seattle Good Business Network

Workforce Development Council of Seattle-King County

KING COUNTY GOVERNMENT

King County Climate Staff

King County Department of Executive Services

King County Department of Local Services

King County Department of Natural Resources and Parks

King County Executive Climate Office

King County Metro

CONSULTANT TEAMS

Culture Shift Consulting
Cascadia Consulting Group, Inc.

Community Engagement

LETTER FROM THE EXECUTIVE

King County Neighbors,

This is an exciting and critical moment for workforce development in King County. Advancements in clean energy deployment bring sustainable, living-wage career opportunities, and it is essential that all communities have access to those benefits. The investments we make today shape the possibilities of the future. and the 2025 Climate and Workforce Strategy offers a roadmap to ensure our region flourishes even amid changing policy and economic landscapes.

The county has made significant progress since launching its first Green Jobs Strategy in 2023. We have built public-private partnerships, launched workforce development and business engagement programs focused on the green economy, and supported our county workforce in upskilling to advance climate action while supporting career development. We continue to explore new ways to grow programs connecting frontline communities to economic opportunity in the green economy.

The new Climate and Workforce Strategy expands efforts to achieve our goals and weave a direct relationship between climate initiatives and employment opportunities in our region. County departments will hold recruitment events in local communities to promote green careers and create job opportunities for young adults to work directly with local businesses and start sustainable careers. Wraparound support services will help eliminate employment barriers and promote long-term career aspirations through public-private partnerships and funding sources. Most importantly, we will ensure our neighbors know they will not be left behind in the clean energy transition.

Collaboration with local employers, education and training providers, schools, community colleges, labor partners, and national and community-based organizations strengthens the fabric of our communities. Thank you to the organizations, workforce development professionals, employers, local governments, labor partners, youth, and community members who have partnered with King County to support a thriving economy. This strategy is possible because of you.

By working together, we can create pathways to economic opportunity through local climate action. Our approach prepares our community to tackle the challenges posed by climate change while acknowledging that the impending transition is an invitation, not a barrier, for all residents to succeed.

With Gratitude,

Transport addado

Shannon Braddock King County Executive



KING COUNTY 2025 CLIMATE AND WORKFORCE STRATEGY:

TURNING THE CLIMATE CRISIS INTO OPPORTUNITY THROUGH LOCAL ACTION

The climate crisis presents both a challenge and a significant opportunity to adapt our local economy. By making it more resilient and equitable, we can create pathways to prosperity for all King County residents. The 2025 Climate and Workforce Strategy acknowledges the critical role local government can play in turning challenges into opportunities by focusing on local actions that directly impact residents' lives through quality employment.

King County's strategy outlines a comprehensive approach to:

- ✓ Leverage the transition to a clean energy economy to grow careers
- ✓ Build accessible bridges to living-wage employment in frontline communities affected by climate change
- ✓ Invest in local industry networks
- ✓ Equip King County employees to contribute to climate action

THE MISSION

Connect frontline communities to living-wage employment opportunities to build a skilled and diverse workforce across the career spectrum.

Our mission reflects King County's dedication to ensuring accessible economic benefits tied to the clean energy transition. Through engaging community events, innovative programs, and sustainable career opportunities for County residents, we have achieved key goals outlined in the 2023 Green Jobs Strategy. The foundation established by our previous strategy has improved King County's ability to integrate workforce development into its climate action efforts. The County has achieved this by collaborating with local partners and utilizing existing County policies and departmental resources. While King County has made significant progress, our work is ongoing. Future efforts will build on successes and identify new opportunities to advance King County's mission.



OUR IMPACT

King County will continue to cultivate a robust network of informed and engaged employers, local businesses, workers, educational institutions, labor partners, and community organizations to accelerate energy and decarbonization progress. This collaborative approach will address labor and business needs for emissions reduction. By offering climate-focused training programs and partnering with employers, the County will ensure the workforce is prepared for its clean energy goals. King County will also focus on securing sustainable public-private funding for climate workforce development. At the same time, it will create clear, measurable pathways to County employment for frontline communities, supporting departmental recruitment.

Finally, the strategy will strengthen the link between climate action and economic opportunity by supporting policies and procedures that enhance labor and economic benefits for workers involved in capital projects, a key area of opportunity in fighting climate change. The following interconnected goals frame the key actions King County is taking to ensure meaningful and tangible impact toward fulfillment of strategy and mission.

₹GOAL 1

Grow careers and employment opportunities through regional partnerships.

King County will prioritize creating quality career opportunities by weaving workforce development into County clean energy initiatives and climate action. King County will continue to grow resource networks supporting career growth within communities disproportionately affected by climate change by partnering with the public and private sectors. The 2024 U.S. Energy and Employment Jobs report shows clean energy jobs growing at more than twice the overall economy rate (4.9 percent vs. 2 percent). Locally, key sectors like transportation, manufacturing, and construction are projected for above-average growth through 2030. New initiatives like King County JumpStart connect youth with paid work-based learning in the clean energy sector. They also educate contractors on climate initiatives, demonstrating our commitment to integrating climate action and economic opportunity.

GOAL 2 Build accessible bridges to living-wage careers addressing climate change within frontline communities.

As a major employer, King County is committed to improving and diversifying its hiring practices through community engagement, workforce partnerships, and better coordination between recruitment. skills training, and workforce development programs. The success of application clinics with organizations like the Urban League of Metropolitan Seattle highlights the effectiveness of this approach. Future efforts will enhance digital outreach and expand key community engagement events, such as the Green Jobs, Green Futures Summit. Additionally, King County will complete a feasibility study for KC PATH (Partnership for Advancement and Training in Hiring), an initiative designed to create clear pathways to County employment from County environmental programs.

₹GOAL 3

Invest in building labor and business networks within local high-demand industry sectors essential to clean energy deployment.

A 2022 analysis identified transportation, manufacturing, construction, and professional services/technology sectors as high-growth sectors in King County through 2030. King County will invest in building labor and business partnerships within high-growth sectors to increase access to economic opportunity through climate initiatives. Moving forward, the County will enhance business and technical assistance for clean energy contractors and conduct a regional industry sector analysis for 2030-2040. This analysis will proactively anticipate future needs and partnership opportunities from a data-driven lens.

GOAL 4

Advance climate action in partnership with King County employees.

King County will leverage its internal resources and workforce expertise to strengthen local pathways to careers and economic opportunities. In practice, this work includes further developing County green career pathways and upskilling the County workforce through industryrecognized sustainability credentialing while empowering project managers to integrate workforce development into capital projects. Moving forward, the County will conduct a feasibility study for a "1% for Workforce" initiative mirroring the "1% for Art Program". This proposed funding stream aims to provide durable, cost-saving, and capacitybuilding resources and education to support staff in enhancing the economic benefits of County capital projects in local communities.

King County will continue taking the lead locally, while working with partners across multiple sectors. Together, we will center sustainable, economic benefits for frontline communities as an essential element of our commitment to action on climate change.

Integration with Strategy Goals

			Integration with Strategy Goals		
Peri	formance Actions	Grow careers and employment opportunities through regional partnerships	Build accessible bridges to living- wage careers addressing climate change in frontline communities	Invest in building labor and business networks within local high demand industry sectors essential to clean energy deployment	Advance climate action in partnership with King County employees
1.1	Integrate workforce development training and employment opportunities into County climate initiatives.	•	•	•	
1.2	Collaborate with the Coalition for Climate Careers (C3) to fill essential gaps in workforce development service delivery and regional coordination.	•	•	•	
2.1	Scale and enhance green career pathways to recruit from frontline communities most affected by climate change.				
2.2	Expand youth and middle-skill worker-oriented outreach campaigns and events for early career and high school-age youth.				
2.3	Conduct a feasibility study to explore KC PATH to fill critical and applicable roles within key King County departments.				
2.4	Expand wraparound supportive services within workforce development programming to emphasize direct income assistance.				
3.1	Increase contractor education and resources to improve the quantity and diversity of local contractors participating in King County-led clean energy projects.			•	
3.2	Conduct a localized Industry Sector analysis for emerging high-growth sectors across a four-county region projected through 2030-2040.			•	
4.1	Expand the Green Skills Development Fund to lead the scaling up of sustainability and energy conservation credentialing and certifications for King County employees.				•
4.2	Develop training resources for capital project managers on how to include workforce development and skills training initiatives, such as paid work-based learning, into capital projects.		•	•	•
4.3	Strengthen department-level coordination to support implementation of 2025 Climate and Workforce Strategy				•
4.4	Explore establishing a "1% for workforce" funding stream for skilled trades and career on-ramps tied to County capital projects.	•	•	•	•

INTRODUCTION

MISSION

Building on the 2023 King County Green Jobs Strategy, the 2025 King County Climate and Workforce Strategy continues the mission of connecting frontline communities with living-wage employment opportunities to build a skilled and diverse workforce across the green career spectrum. This commitment reflects King County's dedication to ensuring accessible, equitable economic benefits and impacts tied to the clean energy transition. The progress made through events, job placements, programs, and initiatives stemming from the 2023 Green Jobs Strategy has been instrumental in laying necessary groundwork. By strengthening partnerships and leveraging existing policies and resources, King County is positioned to more effectively integrate workforce development into its climate action efforts.

Supporting Job Seekers from Frontline Communities

King County's 2020 King County Strategic Climate Action Plan (SCAP) recognizes that frontline communities often bear the brunt of climate change effects and may have limited resource networks to take advantage of the economic opportunities emerging within the clean energy sector.¹ Addressing this disparity with intentional investment is vital to shaping a sustainable future for the region. While increasing frontline communities' economic mobility and empowering them to benefit from the transition to a clean energy economy, King County also builds local capacity to implement and sustain climate solutions.

King County aims to holistically support frontline communities by prioritizing partnerships, programs, and initiatives designed explicitly for middle-skill workers and youth (ages 16-24). Current data from the <u>American Community Survey</u>² indicates that, as of 2023, 44.1 percent of residents in King County fall within the middle-skill category. By serving youth and middle-skill workers, King County can continue to direct



¹ SCAP Sustainable and Resilient Frontline Communities section [https://your.kingcounty.gov/dnrp/climate/documents/scap-2020-approved/2020-king-county-strategic-climate-action-plan.pdf]

² U.S. Census Bureau, QuickFacts: King County, Washington [www.census.gov/quickfacts/fact/table/kingcountywashington/PST045224#qf-flag-NA]

2030 CLIMATE AND WORKFORCE VISION

To meet the goals outlined in the Strategic Climate Action Plan, King County must build a network of employers, local businesses, workers, educational institutions, labor partners, and community-based organizations that are well-informed and positioned to scale up energy and decarbonization efforts. The 2025 Climate and Workforce Strategy will establish a clear roadmap and resource network for:



Meeting labor and business needs for reducing emissions

Climate-focused training programs and employer partnerships to meet critical labor and local business engagement needs for King County's clean energy deployment goals.



Securing sustainable funding sources

Identifying and establishing durable public-private funding streams to support climate workforce development needs.



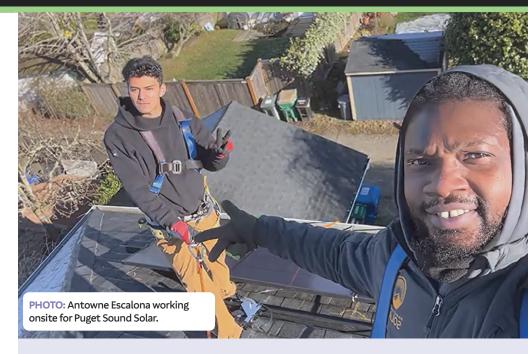
Improving employment pathways for frontline communities

Clear and measurable pathways to secure county employment opportunities, supporting departmental recruitment goals.



Strengthening the connection between climate & economic opportunity

Policies and procedures to enhance labor and economic benefits for workers involved in capital projects essential to clean energy deployment.



Shift from a Green Jobs Strategy to a Climate and Workforce Strategy

The new title of this report, "Climate and Workforce Strategy," emphasizes the County's dedication to ensuring greater access to career and economic opportunities stemming from climate action efforts. The County has seen rapid success in implementing what was first issued as the "Green Jobs Strategy" in 2023. This new name, developed after thorough discussion among community partners and county staff, keeps that original mission intact while more holistically capturing King County's intent and efforts. That includes better addressing the region's evolving needs and emphasizing an urgency to boost workforce and economic benefits driven by climate action over the next five years, in line with the County's SCAP. The strategic change underscores the interconnectedness of climate initiatives and workforce development, ensuring that both objectives can progress in tandem – not opposition – for the benefit of all County residents.

GLOSSARY OF TERMS

Apprenticeship	A structured, paid training program that combines on-the- job training with related supplemental instruction (RSI).			
Employment On-Ramps	Opportunities for workers who have completed training to participate in paid work using their skills while providing an entry point into employment. Examples include apprenticeships or paid internships with guaranteed interviews for full-time roles upon completion.			
Frontline Communities	Communities disproportionately impacted by climate change due to existing and historical racial, social, environmental, and economic inequities and with limited resources and/or capacity to adapt.			
Green Jobs	Living wage positions providing environmental benefits (such as clean energy deployment) in high-demand industry sectors of construction, manufacturing, transportation, and professional services.			
Living Wages	The hourly rate that individuals in a household must earn to support themselves and their families. The assumption is that the sole provider is working fulltime (2,080 hours per year). King County will assess how participants are connected to an opportunity to earn a living wage, as calculated by the MIT Living Wage Calculator, when supporting or designing workforce collaborations.			
Middle-Skill Workers	Workers who have a high school diploma but do not have a four-year degree.			
Minority and Women-Owned Business Enterprises (MWBEs)	A business is considered a "Minority- and Women-Owned Business Enterprise" or "MWBE" if at least 51% of the business is owned, operated, and controlled by one or more U.S. citizens or U.S. permanent residents who are women and/or members of designated minority groups.			

On-the-job Training (OJT)	A method of teaching the skills, knowledge, and competencies required for employees to perform a specific job within the workplace or work environment. This form of training takes place while an individual is actively performing and carrying out their job functions.				
On-Ramp Programs	Specific time bound workforce development of internship programs aimed at preparing participants for employment.				
Related Supplemental Instruction	Classroom instruction associated with an apprenticeship.				
Upskilling	Improving a person's professional aptitude through additional training or education; increasing or enhancing a person's current skill set.				
Work-Based Learning	Short-term (up to 240 hours) paid training designed to support participants in obtaining resume-ready work experience within their field of interest.				
Wraparound Services	Holistic, coordinated, and solution-focused approach to case management for job seekers in frontline communities, including youth, centered around relationships and tailored toward building strengths and promoting success				
Workforce Development	The practices of preparing a local workforce to meet the local labor market demands. Workforce development includes outreach to job seekers from trusted sources to connect them with training programs offering industry-recognized credentials and preparing them to transition into employment within their area of training. Comprehensive workforce development requires active engagement from local governments, workforce development boards, community organizations, education and training providers, and labor and employers.				



COMMUNITY IMPACT

High-quality community engagement is crucial to driving effective and impactful workforce development and building long-lasting employment pipelines for youth and middle-skill workers. King County's Green Jobs Strategy (2023) underscored the importance of events and engagement campaigns aimed at creatively connecting with communities around emerging economic opportunity across the high-growth green industry sectors of construction, manufacturing,

transportation, and professional services/tech. Since the Green Jobs Strategy's launch, the King County has hosted or sponsored over twenty community-centered events providing large scale exposure for hundreds of local residents to green industries, generating interest in the region's growing green economy, and strengthening recruitment pipelines from frontline communities.

FEBRUARY 2023

Application Clinic for Parks Mobile Engagement Team (MET)

Two-hour application clinic to support youth in applying for positions on the Department of Natural Resources and Parks MET.

FEBRUARY 2023

Wastewater Treatment Division Operatorin-Training Information Session

Tailored information session to connect community partners to the King County Wastewater Treatment Division Operator-in-Training (OIT) Program. This event resulted in an increased number and diversity of applications to the OIT Program.

MAY 2023

Green Digital Media Marketing Program Information Session, in collaboration with King County Center for Education and Career Opportunities

The King County Climate and Workforce team, in partnership with the Department of Community and Human Services' CECO Program, held an information session at Shoreline Community College to promote the Green Digital Media Marketing Program. This event successfully raised awareness of the program and led to an increase in student applications.

MAY 2023

ENERGIZE Information Session, in partnership with King County YouthSource and PACT

Information session in partnership with YouthSource and PACT, to promote paid, work-based learning opportunities tied to the ENERGIZE program.

SEPTEMBER 2023

WeldWorks/Department of Executive Services Application

Two-hour application clinic for WeldWorks participants, providing tailored resume and application support for open roles in the Department of Executive Services. This application clinic equipped community members with the necessary tools to be competitive applicants while growing and diversifying the County's pool of qualified applicants.

SEPTEMBER 2023

Green Jobs, Green Futures Summit

First Green Jobs, Green Futures Summit, bringing together over 400 attendees from Seattle high schools, community-based organizations, and the general public. The interactive event featured engaging demonstrations from green industry employers, showcasing the variety of green career opportunities available in the region and generating excitement about this growing sector.

SEPTEMBER 2023

Green Jobs Talent Jam

The King County Climate and Workforce team hosted its first "Green Jobs Talent Jam," a one-of-a-kind event designed to foster connections between local contractors, including minority- and women-owned businesses, and key players in the clean energy industry, including industry professionals and government procurement staff. The event generated promising new business relationships and expanded networking opportunities for participating small businesses.

DECEMBER 2023

Youth in Climate Luncheon

Luncheon to celebrate the achievements of students graduating from the ENERGIZE work-based learning pilot and connect them to local contractors with hiring needs. This event resulted in networking and employment opportunities for participating youth.

NOVEMBER 2023

Community Passageways / Department of Natural Resources and Parks, Solid Waste Division Application Clinic

Two-hour application clinic for members of Community Passageways, providing tailored resume and application support for open roles in the Department of Natural Resources and Parks, Solid Waste Division. This application clinic equipped community members with the necessary tools to be competitive applicants while growing and diversifying the County's pool of qualified applicants.

SEPTEMBER 2024

Department of Execu Services, Facilities Management Divisior Green Janitor Educati Program Graduation

Through sponsorship fror Green Skills Development 25 Department of Execut Services Facilities Manag Division custodians gradu from the Green Janitor Ho Education Program.

SEPTEMBER 2024

2024 Green Jobs, Gree Futures Summit

Second annual Green Jobs Futures Summit to provid from local high schools an pre-apprenticeship progra exposure to high growth s of the green economy. Thi yielded 300+ attendees at engagement from over 15 businesses and employers

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AUGUST 2022

WeldWorks/Department of Natural Resources and Parks, Solid Waste Division Application Clinic

Two-hour application clinic for WeldWorks participants, providing tailored resume and application support for open roles in the Department of Natural Resources and Parks, Solid Waste Division. This application clinic equipped community members with the necessary tools to be competitive applicants while growing and diversifying the County's pool of qualified applicants.

AUGUST 2022

Burien SolarPunk Festival

The King County Climate and Workforce team hosted a booth at the Burlen SolarPunk Festival to solicit public feedback and engagement for the first iteration of the Green Jobs Strategy. The Burlen SolarPunk Festival is a one-day event organized by KeyTech Labs, showcasing local eco-friendly businesses and employers.

APRIL 2023

Seattle Good Business Network – Green Job Pathways Program Sponsorship

This sponsorship supported the launch of Seattle Good Business Network's Green Job Pathways Program, which connects youth with summer internships at local sustainable businesses.

APRIL 2023

University of Washington Climate Solutions Summit Sponsorship

This sponsorship supported the University of Washington's 2023 Climate Solutions Summit, a student-led conference bringing together climate action leaders and featuring a student case competition.

SEPTEMBER 2023

Emerald Cities Collaborative – Electric Vehicle (EV) Workshop Series

The King County Climate and Workforce team, in collaboration with Emerald Cities Collaborative, hosted a series of EV Charging Workshops for women and minority-owned electrical contractors. The workshops were designed to educate participants about current and upcoming opportunities in EV charging installation work, including federal and state funding, EV certification and training, and EV infrastructure work opportunities. This event series saw a high turnout of electrical contractors, many of whom reported having directly benefited from the information and resources shared.

AUGUST 2023

Burien SolarPunk Festival Sponsorship

This sponsorship provided support in organizing the 2023 Burien SolarPunk Festival. The Burien SolarPunk Festival is a one-day event organized by KeyTech Labs, showcasing local eco-friendly businesses and employers.

APRIL 2024

King County Metro- Green Custodian Health Program Graduation

Through sponsorship from the Green Skills Development Fund, 45 Metro Transit Facilities Specialists graduated from the Green Custodian Health Program.

Burien SolarPunk

The Burien SolarPunk

showcasing local

employers.

Festival Sponsorship

Festival is a one-day event

organized by KeyTech Labs,

eco-friendly businesses and

MARCH 2024

Pro-Equity Contracting Event

The King County Executive Climate Office, in collaboration with the Department of Executive Services Office of Business Development and Contract Compliance, King County Metro, and the Department of Natural Resources and Parks hosted the Pro-Equity Contracting Event to educate small businesses on upcoming County contracting opportunities.

SEPTEMBER 2024

JumpStart Hiring Eve

First JumpStart hiring ev to connect work-based learning graduates to full employment opportuniti with local contractors.

SEPTEMBER 2024

Coalition for Climate Careers (C3) Reception

The C3 Reception celebra the formation of the newl appointed Executive Stee Committee, launching a fi governance structure for coalition.

COMMUNITY ENGAGEMENT AND

FEEDBACK PROCESS

Building on extensive community engagement <u>conducted in 2023</u>,³ the development of the 2025 Climate and Workforce Strategy features a leaner community engagement process, distilling input from key implementers and stakeholders.

To inform the development of the 2025 Climate and Workforce Strategy, King County contracted with Culture Shift Consulting to conduct an independent community engagement feedback process tailored to key implementors and partners crucial to the success of the strategy. A total of 89 participants contributed to this community engagement process.

This process consisted of listening sessions and focus groups with key stakeholder groups, including King County departments, labor and community partners, business owners, youth, and other external partners. Culture Shift Consulting facilitated these sessions to gather input on the implementation of existing Green Jobs Strategy initiatives and to solicit feedback to inform King County in updating the strategy.

For each group, discussions centered on:

- Reactions to completed work under the initial Green Jobs Strategy.
- **Proposed actions** for the 2025-2030 timeframe.
- Factors that would enhance collaborative implementation of the updated strategy.
- **Recommendations** for how to improve communication and community engagement in strategy implementation.

TABLE 1. Below is an excerpt from summary findings from the Culture Shift Consulting report received across listening sessions and focus groups. For the full community engagement feedback report, including participation data, methodology, and key findings, please refer to Appendix A.

Audience	Reaction to current work	How to expand	Motivators	Communications recommendations
Youth	Short-term training opportunities enable exploration and adding new qualifications to their resumes.	Conclude programs such as JumpStart with workshops that help translate new skills into future job opportunities.	Understanding the career advancement opportunities and earning potential in the green jobs sector.	Incorporate both digital communications and inperson connection reach young people.
Business owners	Wages for entry-level positions in certain trades are out of alignment with ECO's definition of a living wage.	Prioritize hands-on learning for business owners to complete the administrative tasks related to contracting with King County.	Programs need to be simple to enroll in and the benefits of participating need to outweigh the administrative burden they pose.	Streamline outreach across opportunities so that information is not dependent on an individual project manager's contacts.
Key implementers	Short-term programs like JumpStart have the potential to provide entry-level workers a foothold into the industry.	Focus on cross-sector partnerships (government, labor, industry, philanthropy) to ensure training turns into job placements.	A clearly articulated vision for where ECO intends short-term programs like JumpStart to lead in 6 months, one year, etc.	Pull out key points and calls to action from lengthy reports and share through interactive settings like Lunch and Learns.
Community partners	Short-term programs like JumpStart are a good starting point to increase access to the sector.	Build on short-term programs by expanding who is eligible and what sectors are included and providing support to connect with long-term opportunities.	Evidence that initiatives are leading to well-paying jobs with respectful work environments for frontline communities.	Directly share communications that focus on information that is relevant to community partners.
Labor partners	Initial collaboration on Green Skills Development Fund was productive but would have liked for it to be sustained.	Collaborate with labor organizations that have strategic priorities related to climate justice on developing initiatives that advance the goals of both the GJS and those organizations.	Learning the outcomes of collaborative efforts so labor organizations can see what value came out of their time and effort.	Host information sessions about new programs and share opportunities relevant to union members with representatives.
King County staff	Career pathways are the cornerstone to the success of the GJS, since career advancement will motivate workers to stay in the field.	Deepen the impact of the GJS by expanding the audiences served and sectors encompassed by the strategy, and by creating long-term opportunities for program participants.	Clarity on how the GJS connects with their departmental priorities and county-wide priorities, and clarity on when it is appropriate to use GJS resources versus department-specific resources.	Increase visibility of GJS initiatives and share successes and lessons learned that can enable departments to justify spending time and budget on initiatives.

³ King County Green Jobs Strategy Report, February 2023 [https://your.kingcounty.gov/dnrp/climate/documents/kc-green-jobs-strategy/full-report.pdf]

Appendix

Executive Summary Introduction Community Engagement Goals and Actions Looking Ahead Performance Measures Appendix

Participation Spectrum

The International Association for Public Participation's Spectrum of Public Participation⁴ outlines five levels of community involvement in democratic decision-making, representing a continuum of increasing public influence. King County aimed for a "collaborate" level of participation. Participants in listening sessions and focus groups were asked to provide feedback on both the intent and implementation of the initial Green Jobs Strategy's goals, and to offer input on the design and implementation of the Climate and Workforce Strategy itself.

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
GOAL	To provide balanced and objective information.	To obtain public feedback on analysis, alternatives, and/or decisions.	To work directly with the public to ensure their priorities are understood and considered.	To engage the public as active partners throughout each aspect of the decision making process.	Place final decision making in the hands of the public.
PROMISE	We will keep you informed.	We will keep you informed, listen to your input, and provide feedback on how your input influenced the decision.	We will ensure your priorities are reflected in solutions and provide feedback on how your input influenced the decision.	We will seek your advice, insight, and innovation and incorporate your input to the extent possible.	We will implement what you decide.

INCREASING IMPACT ON THE DECISION ▶▶▶

ENGAGEMENT METHODOLOGY

Six listening sessions

King County departments

- Department of Executive Services
- Department of Local Services
- Department of Natural Resources & Parks
- Metro
- · King County Climate Team

Community partners

whose work aligns with the Green Jobs Strategy

These sessions began with an overview of the 2023 Green Jobs Strategy's goals and implementation updates, followed by a one-hour feedback session with participants.

Three focus groups

Youth

in partnership with the Seattle Good Business Network's Green Job Pathways Program

Key implementers

a mixture of County staff and external workforce development organizations

Business owners

These sessions presented synthesized feedback from the listening sessions and facilitated in-depth qualitative feedback from participants.

The focus groups provided extensive input on the 2023 Green Jobs Strategy's implementation and offered tailored feedback on proposed programs and initiatives for the 2025-2030 Climate and Workforce Strategy.

Timeline of Engagement Activities

	e of Engagement Activiti						
*	JUNE 2024	*	JULY 2024	-	AUGUST 2024	/ ❖	SEPTEMBER 2024
	Engagement kickoff with Culture Shift Consulting		Listening Sessions Community Partners		Youth focus group		Key Implementers focus group
	Participation strategy developed		 Department of Executive Services Department of Local Services Department of Natural Resources and Parks 		•	Business Owners focus group	
	Public input survey launched and currently ongoing		 King County Climate Tea King County Metro 		aliu Faiks		

⁴ The International Association for Public Participation's Spectrum of Public Participation [https://iap2.org.au/resources/spectrum/#:~:text=The%20Spectrum%20shows%20that%20differing%20 levels%20of%20participation,made%20to%20the%20public%20at%20each%20participation%20level]

Goal 1

Goal 2

Goal 3

Goal 4

GOALS AND ACTIONS OF THE

CLIMATE & WORKFORCE STRATEGY

This section details the four key goals of the 2025 Climate and Workforce Strategy, along with the specific actions King County will implement between 2025 and 2030 to achieve them. These goals and actions were developed using a targeted community engagement process, data from the local workforce development landscape, and lessons learned from the implementation of the 2023 Green Jobs Strategy.

Each section below is structured to provide a comprehensive overview of the goal area.

"THE OPPORTUNITY"

establishes the context and rationale for the goal

"OUR PROGRESS"

highlights achievements and progress made to date under the 2023 Green Jobs Strategy

"MOVING FORWARD"

outlines the key actions advancing the goal in the coming years

GOAL 4

ADVANCE CLIMATE ACTION IN PARTNERSHIP WITH KING COUNTY EMPLOYEES

King County will harness departmental resources to further develop and expand green career pathways, upskill its workforce through industry-recognized sustainability credentialing, and connect project managers with esources to integrate workforce development into climate action-fecused capital projects.

The Opportunity

King County staff are essential to achieving the ambitious climate action goals outlined in the SCAP. As a large organization with a significant workforce, King County has a unique opportunity to upskill its employees with sustainability and energy conservation credentialing, while simultaneously empowering aprital project managers to incorporate skills-based training into climate action-focused contracts. This integrated approach will weave workforce and economic development directly into internal County initiatives and projects, maximizing the impact of climate action investments. Doing so will not only require strengthened interdepartmental coordination but also the establishment of long-term funding streams and resource networks to advance skills relative and workforce development within cavital poincers.



PHOTO: 25 Department of Executive Services, Facilities Management Divison custodians graduate with certifications from the Green Janitor Health Education Program, through sponsorship from the Green Skills Development Fund

Our Progress



Developed resources for capital project managers to integrate skills training and career on-ramps directly into capital projects.



Supported over 100 King County employees in accessing sustainability and energy conservation credentialing through the Green Skills Development Fund, doubling the goal outlined in the 2023 Green Jobs Strategy.

Moving Forward

- Complete a feasibility study for a proposed "1% for Workforce" initiative to scale and expand staff capacity and community partnerships for skills trades and career on-ramp opportunities on capital projects across King County.
- Develop a resource guide for County departments to integrate skills training and JumpStart work-based learning into capital projects.
- Publish a contract language library available to capital project managers that provides guidance on integrating work-based learning and skills training into capital projects.
- Launch web-based training videos to share knowledge with capital project managers on effectively utilizing Equity and Social Justice (ESJ) credits within the Sustainable Infrastructure Scorecard.



Goal 1

Goal 2

Goal 3

Goal 4

GOAL 1

GROW CAREERS AND EMPLOYMENT OPPORTUNITIES THROUGH REGIONAL PARTNERSHIPS

King County will prioritize creating quality career opportunities while expanding clean energy initiatives and advancing climate action. King County will partner with the public and private sectors to establish resource networks supporting clean energy employment opportunities in frontline communities regionally.

The Opportunity

According to the 2024 U.S. Energy and Employment Jobs report,⁵ clean energy jobs grew at more than double the rate of job growth in the overall economy. Specifically, clean energy jobs increased by 4.9%, compared to just 2.0% for the rest of the economy, adding 149,000 new jobs in 2023. Locally, industries impacted by the clean energy transition—such as transportation, manufacturing, and construction—are projected to grow at above-average rates through 2030 in King County. By fostering collaboration among employers, training providers, community-based organizations, schools, and municipalities, our region can proactively develop and expand programs and partnerships. This will help prepare our local workforce for employment in growing sectors and attract new businesses to the area, thereby strengthening the link between climate action and economic opportunity.



Our Progress



Launched King County JumpStart. This growing network of over 20 local employers, eight education and training providers, and community partners connects youth ages 18-24 with paid, work-based learning and employment opportunities in the clean energy sector.



Developed community-facing events and campaigns in local frontline communities to highlight the clean energy sector and the green economy, connecting with hundreds of residents.



Established the Coalition for Climate Careers (C3), a public-private partnership in collaboration with the City of Seattle and the Port of Seattle, to lead regional growth initiatives and establish a community of practice for climate workforce development.



Piloted contract language that enables paid work-based learning tied to County climate action initiatives, such as ENERGIZE, which innovates how County projects can offer private economic co-benefits and career launch opportunities.

⁵ United States Energy & Employment Report 2024 [www.energy.gov/sites/default/files/2024-10/USEER 2024_COMPLETE_1002.pdf]

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wsolar.com

Moving Forward

King County plans to improve workforce development and support climate action initiatives through several key actions:

- Scale connections for contractors and sub-contractors working on climate action projects, including ENERGIZE⁶, to paid, work-based learning opportunities through JumpStart.
- Launch a communications campaign to raise awareness of the JumpStart program. This campaign will include a website, news articles, and other multimedia materials to promote the program's benefits.
- Secure public-private funding to cover 50 percent of the costs for paid, work-based learning opportunities on
- developing businesses.
- Serve 200 young adults across the four-county region through JumpStart, ensuring that over \$10 million in communities through paid opportunities generated by climate initiatives in the surrounding area.

and training providers, local government, and community partners connecting youth aged 18-24 with paid work-based learning and employment opportunities in the clean energy sector.

climate action projects for youth and middle-skill workers in frontline communities. Partner with C3 to offer micro-grants to employers and clean energy contractors focused on building capacity and wages are directly invested in young adults from frontline JumpStart is a growing network of local employers, education PHOTO: Green Jobs, Green Futures Summit attendees exploring a solar panel at the Northwest Electric & Solar demo station. King County Energize heat pump program website [https://kingcounty.gov/en/dept/executive/ 515

governance-leadership/climate-office/focus-areas/building-decarbonization/energizel

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Action 1.1 Integrate JumpStart training and employment opportunities into County climate initiatives

King County has made significant progress in building partnerships across key industries to develop employment pathways through ongoing climate initiatives. The JumpStart program collaborates with training providers to equip participants with skills training and paid, work-based learning. This includes 240-hour on-the-job training internship experiences with a network of employers in the clean energy sector, including solar, HVAC (heat pumps), plumbing, and electrical contractors.

JumpStart actively recruits women, people of color, and other underrepresented communities in the trades and infrastructure sector. This is accomplished through local community partnerships, direct outreach events, and digital marketing strategies. The program collaborates with local pre-apprenticeship training providers such as the Seattle Central College PACT program, the Urban League of Metropolitan Seattle, Emerald Cities Collaborative Northwest, and Seattle YouthBuild to refer trainees to the JumpStart network. JumpStart staff members attend multicultural community events to recruit residents and participate in the annual Green Jobs, Green Futures Summit. This summit aims to reach frontline communities and promote employment in the green economy. With federal funding from the WA Good Jobs Challenge Initiative JumpStart will connect 80 youth to paid, work-based learning and employment opportunities in the clean energy sector by December 2025.

The Executive Climate Office (ECO) will collaborate with JumpStart staff and partners in the Department of Community and Human Services to scale the program. They will require contractors involved in capital projects and programs led by ECO to join the JumpStart network. This initiative will

enable these contractors to host paid, work-based learning opportunities for JumpStart participants, providing project-connected, on-the-job experiences for members of frontline communities

King County will also invest in a sponsored communications campaign to increase awareness and promote the benefits of the JumpStart program by December 2025. This campaign will include creating a dedicated website, news articles, and multimedia resources. Moving forward, King County aims to directly connect a minimum of 200 youth to living-wage job opportunities through JumpStart, resulting in over \$20 million in wages generated within frontline communities.



Strategy in Action Connecting County Contracting and Workforce Development

King County champions economic co-benefits for local communities when planning climate change-related projects. King County created contract language that requires contractors involved in County-funded clean energy projects under the Executive Climate Office to join the JumpStart Contractor Network. For instance, contractors working with King County through the ENERGIZE program became part of the JumpStart Network and provided paid, work-based learning opportunities on their projects. Integrating paid, work-based learning into County projects helps create career exposure and clear local economic benefits to climate action projects across King County.

⁷ Seattle Central College Wood Technology Programs Pre-Apprenticeship Construction Training (PACT) [https://woodtech.seattlecentral.edu/programs/pre-apprenticeship-construction-training/pre-apprenticeship-construction-training-pact]

⁸ Urban League of Metropolitan Seattle Career Bridge [https://urbanleague.org/careerbridge/]

⁹ Emerald Cities Collaborative Northwest [https://emeraldcities.org/our-presence/northwest/]

¹⁰ Seattle YouthBuild [https://youthcare.org/homeless-youth-services/employment/youthbuild/]

¹¹ Washington Student Achievement Council: Washington Jobs Initiative [wsac.wa.gov/wii]

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Action 1.2 Collaborate with C₃ to fill essential gaps in workforce development service delivery and regional coordination

The C3 represents a dynamic alliance formed among diverse public and private entities, as well as frontline communities. Its mission centers on cultivating an inclusive and thriving green workforce in King County. In the spring of 2024, King County initiated C3 in collaboration with the City of Seattle and the Port of Seattle, bringing together a diverse executive steering committee. This committee is made up of both former and current apprentices from skilled trades, alongside community leaders, non-profit advocates, union representatives, government officials, employers, and educators. Together, they are guiding the coalition's efforts to serve the four-county region, focusing on coordinated, high-quality workforce development partnerships that effectively leverage both public and private funding.

King County is firmly committed to empowering C3 to innovate and expand its initiatives. This commitment involves utilizing private funding to establish paid, work-based learning experiences for youth — an opportunity that is often restricted under federal funding guidelines. Additionally, the coalition will explore employer- and contractor-led capacity-building grants that provide small businesses engaged in clean energy deployment with essential tools and resources to enhance their operational capabilities. C3's executive steering committee is focused on fostering cross-sector partnerships that elevate career exposure and placement activities within frontline communities, ensuring initiatives are accessible to all.

Public-private partnerships are indispensable in addressing current funding disparities and creating flexible programs that can effectively respond to labor needs within the still-emerging green economy. Through these collective efforts, King County is taking significant steps toward building a sustainable, equitable future.



Strategy in Action Coalition for Climate Careers (C₃)

King County has collaborated with the City of Seattle and the Port of Seattle to launch the Coalition for Climate Careers, C3, a strategic collaboration among public and private organizations and frontline communities dedicated to establishing an inclusive and prosperous green workforce in the Puget Sound Region. Coalition Members work together to shape C3's strategic direction and provide public and private sector support for regional programs and initiatives that increase equal access to green careers.

GOAL 2

BUILD ACCESSIBLE BRIDGES TO LIVING-WAGE CAREERS ADDRESSING CLIMATE CHANGE IN FRONTLINE COMMUNITIES

King County aims to enhance and expand pathways for accessible, living-wage green careers in frontline communities across the region and within its departments.

The Opportunity

With over 17,000 employees,¹² King County is a top employer in Washington state. The County will focus on engaging the community, building workforce partnerships, and connecting recruitment with skills training and workforce development programs to improve and diversify its hiring. In the past two years, better coordination among departments has enhanced online and in-person outreach efforts. King County has already piloted several successful initiatives to broaden workforce community recruitment partnerships and can benefit from applying these ideas more widely across different departments and programs.



Our Progress

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Developed and scaled the application clinic model with local organizations such as the Urban League of Metropolitan Seattle to offer on-site application clinics (2-hour informative workshops ending in completed applications for King County roles). These clinics connect residents to County career opportunities in the environmental sector in collaboration with King County recruiters.



Connected hundreds of local youth to career opportunities in the green economy through the Green Jobs, Green Futures Summit. This initiative has not only provided real-world climate action experience for young people but also inspired them to contribute to the future of clean energy.



Facilitated access for trainees in JumpStart to participate in Guaranteed Basic Income (GBI) programs¹³ for flexible cash stipends to overcome employment barriers.

King County Department of Human Resources [https://kingcounty.gov/en/dept/dhr/about-king-county/jobs-benefits/find-a-job#:~:text=King%20County%20is%20one%20of,critical%20to%20 our%20continued%20success

Workforce Development Council of Seattle - King County [www.seakingwdc.org/latest-news/gbi-report]

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Moving Forward

King County plans to improve workforce development and support climate action initiatives through several key actions:

- Support County departments in improving digital outreach for green careers pathways work and County job board updates for enhanced data tracking of recruitment and outreach efforts.
- Scale the Green Jobs, Green Futures Summit event to include younger audiences and more than double in size.
- Complete a feasibility study for KC PATH (Partnership for Advancement and Training in Hiring) to strengthen direct pathways into employment across King County departments.
- **Expand wraparound supportive services** for signature workforce development program JumpStart.

Action 2.1 Scale and enhance County green career pathways to recruit from frontline communities most affected by climate change.

Goal 4

King County is working to support County departments in continuing and scaling the green career pathways work advanced during the implementation of the 2023 Green Jobs Strategy. King County aims to create accessible green career paths within departments to encourage more diverse outreach for County jobs, especially from frontline communities. King County plans to improve recruitment tools and methods, including updating the County's job board to highlight green jobs as a specific searchable category. This will help people find jobs in County departments that focus on green careers and allow the County to track the growth and diversity of applicants for select positions. Career pathways provide prospective employees with insight into the full range of career growth opportunities at King County, while also offering current employees a clear plan for career advancement. King Country will also continue to support outreach efforts, such as application clinics, in collaboration and consultation with departmental Human Resource teams. These workshops bridge an awareness gap by helping middle-skill workers seek employment with King County. These efforts aim to build strong recruitment partnerships between County departments and local organizations that serve career-ready clients.



Strategy in Action Application Clinic Outreach

Application clinics are two-hour workshops designed to directly connect career-ready job seekers with county recruiters to review open job opportunities and answer questions before staff and community partners assist applicants in completing county applications. Application clinics help local workforce development organizations connect participants with accessible entry-level county employment opportunities, quality wages, and benefits. King County has continued collaborating with trusted community-based partners like the Urban League of Metropolitan Seattle to connect county recruiters and job seekers to available positions, emphasizing roles within County green career pathways.

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Action 2.2 Expand youth and middle-skill workeroriented outreach campaigns and events for early career and high-school-age youth

During the Climate and Workforce Strategy community engagement process, various partners and dedicated County employees underscored a critical need to connect with younger job seekers. Particularly, those in the demographics below the typical 18-24 age range that King County initiatives, such as JumpStart, often focus on.

In response, King County will broaden the audience for the <u>Green Jobs</u>, <u>Green Futures Summit</u>¹⁴ by including younger high school students and expanding the age range for career exposure events to include 16-24-year-olds. This innovative Summit reimagines the conventional job fair format by putting a spotlight on hands-on learning experiences. The Summit showcases dynamic demonstrations from key local industries, including transportation, construction, and technology. Attendees engage with interactive stations designed to ignite interest and enthusiasm among local students, encouraging them to explore potential career paths connected to advancing climate solutions and contributing to the green economy. Through this expansion, the Climate and Workforce team aims to achieve an ambitious 200 percent increase in attendance at the Green Jobs, Green Futures Summit, using the participation data from the 2024 event as a benchmark.

King County is also exploring expansion of the NextGen Climate Internship Program. This program was developed in response to the recommended actions outlined in the 2020 SCAP. It provides undergraduate and graduate students with hands-on experience in addressing and mitigating the effects of climate change through SCAP implementation. Interns work directly with various County teams and projects, gaining insights into how policies are put in place at the County level to support communities and engage stakeholders. Throughout the program, interns receive direct mentorship and guidance to aid in their career development.

The proposed expansion aims to include external host sites through partnerships with trusted local businesses and organizations.

To bolster the efforts in engaging youth and middle-skilled workers, King County plans to actively spotlight youth/middle-skill worker-focused environmental initiatives spearheaded by King County departments. By December 2030, King County will complete promotional campaigns highlighting existing King County programs, such as the Parks Youth Conservation Corps¹⁵ program, the Solid Waste Division's upcoming deconstruction program, and the Wastewater Treatment Division (WTD) Operator-in-Training¹⁶ programs.



Strategy in Action 2024 Green Jobs, Green Futures Summit

Developing strong relationships and connections in frontline communities is essential to career exposure and engagement. Events like the 2024 Green Jobs, Green Futures Summit create an opportunity to engage youth from underrepresented backgrounds in career exploration through a climate-informed lens. The summit works with diverse high schools and community organizations in underrepresented areas to connect attendees to interactive demo stations designed to highlight essential skills in various careers.

¹⁴ C3 Summit [www.climatecareerscoalition.org/summit]

¹⁵ King County Parks Youth Conservation Corps [https://kcpyouthcorps.org/]

¹⁶ King County Wastewater Treatment Division Operator-in-Training Program [https://kingcounty.gov/en/dept/dnrp/waste-services/wastewater-treatment/about/join-our-team/operator-in-training]

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Action 2.3 Conduct a feasibility study to explore KC PATH to fill critical and applicable roles within key King County departments

King County offers a variety of on-ramp programs, such as the WLRD WA Conservation Corps Program, WTD Clean Water Ambassadors, 17 JumpStart, DLS Road Engineering Internship Program, 18 and the Jobs and Housing Program.¹⁹ Many of these programs focus on environmental initiatives. Graduates from these programs gain valuable skills and a solid foundation for employment within King County.

The KC PATH Program is designed to emulate L.A. County's PLACE (Preparing Los Angeles for County Employment) Program.²⁰ PLACE's goal is to facilitate the transition of eligible participants from L.A. County's on-ramp programs to full-time, permanent positions within the county. The PLACE Program prepares individuals facing significant barriers to employment for entry-level permanent county jobs, providing a clear career pathway. This model encourages collaboration among key labor and community-based workforce development organizations to identify

participants who are job-ready and to provide them with specialized training for roles within the county. This approach is similar to previous County initiatives, like the Jobs and Housing Program.

Goal 4

To enhance collaboration and coordinated action, King County will work with relevant departments to conduct a feasibility study for the KC PATH model. This study, developed in partnership with the County's departments and labor organizations, will align workforce planning needs among stakeholders in the KC PATH development process. Currently, workforce development programs across the County operate in isolation. Establishing more centralized resources has the potential to enhance support for participants in County programs seeking long-term career opportunities.

As the County workforce ages, the demand for skilled workers in highdemand roles increases, particularly in departments essential to environmental stewardship. By adapting the PLACE model into the KC PATH Program, King County — as a major regional employer — can take the lead in developing and hiring local talent, especially from frontline communities.

- King County Natural Resources and Parks Internships and Career Exploration [https://kingcounty.gov/en/dept/dnrp/waste-services/wastewater-treatment/education/learn-about-water/internships]
- King County Road Services' Internships Program [https://kingcounty.gov/en/dept/local-services/transit-transportation-roads/roads-and-bridges/projects-and-programs/internship-program]
- King County Jobs and Housing Program [https://kingcounty.gov/en/dept/executive/governance-leadership/performance-strategy-budget/jobs-housing]
- Los Angeles Department of Economic Opportunity Biannual PLACE Program Report [https://file.lacounty.gov/SDSInter/bos/bc/1143280_PLACEProgramReportBack_2023.06.05Final.pdf]



Strategy in Action

NextGen Climate Internship 2024 Annual Report

King County recognizes youth as vital partners in addressing the climate crisis. The NextGen Climate Internship program empowers undergraduate and graduate students to contribute to the King County 2020 SCAP. Co-designed with young people, this program provides a cohort of students with professional development, training, and mentorship as they work alongside County staff on yearlong SCAP implementation projects. While some NextGen interns have transitioned into full-time County positions, the proposed PATH program will create more formal pathways and entry points from programs like NextGen into full-time County roles.

IMAGE: 2024

Action 2.4 Expand wraparound supportive services within workforce development programming to emphasize direct income assistance



PHOTO: King County staff and JumpStart participant Hekmatullah Salim at a JumpStart hiring luncheon.

Since 2022, King County has piloted workforce development initiatives that provide direct income assistance through paid, work-based learning for graduates of workforce training and pre-apprenticeship programs like JumpStart. This paid, work-based learning allows successful graduates of pre-apprenticeship programs to participate in 240 hours of paid internship experiences, enabling them to apply the skills they acquired during training. Graduates affiliated with King County receive a compensation rate of \$25 per hour, totaling \$6,000 before taxes. This financial support enables pre-apprenticeship graduates to gain valuable work experience in their fields of interest while earning compensation to help alleviate employment barriers.

JumpStart has also partnered with the Seattle-King County Workforce Development Council (Sea-King WDC) to support participants of the JumpStart program through Guaranteed Basic Income (GBI) funds. These GBI funds are designed to address poverty by providing flexible cash assistance that helps individuals move towards achieving stable careers, housing, and educational goals. King County plans to expand its partnership with Sea-King WDC to ensure all eligible JumpStart participants can access GBI resources by 2027. By combining paid, workbased learning with GBI support, King County aims to enhance supportive services in workforce programs, reduce the administrative burden of paperwork and lengthy intake meetings, and empower individuals to have more control over how they use the funds to overcome job-related challenges.



PHOTO: J'brea Napoles-Ibarra, hired on at Veritas, a women owned and operated Electrical company, and accepted into CITC Electrical Apprenticeship program.

This work will include streamlining paid, work-based learning through digital scheduling and direct deposit for payments, as well as securing reliable funding sources. King County strives to establish a strong support system to help participants succeed in their careers.



Strategy in Action JumpStart & GBI Collaboration

King County recognizes the value of co-benefits and wraparound support services for workforce development programs like JumpStart. JumpStart has partnered with the Seattle King County Workforce Development Council (Sea-King WDC) to offer (Guaranteed Basic Income) GBI services to eligible JumpStart participants. Participants use flexible stipend funds to overcome employment barriers such as limited childcare and/or transportation access. King County is looking forward to expanding the partnership to offer this essential resource to more participants in the future.

GOAL 3

INVEST IN BUILDING LABOR AND BUSINESS NETWORKS WITHIN LOCAL HIGH-DEMAND INDUSTRY SECTORS ESSENTIAL TO CLEAN ENERGY DEPLOYMENT

King County will invest County resources in building labor and business partnerships within existing high-growth sectors to increase access to economic opportunity through climate action initiatives.

The Opportunity

Supporting workforce development across the local green economy requires a strong understanding of the local economic landscape. A 2022 analysis identified transportation, manufacturing, construction, and professional services/technology as key high-growth green job sectors in King County. To support these sectors, King County has actively cultivated relationships and fostered collaboration with local businesses and contractors. However, feedback from these businesses highlights the need for improved information sharing and streamlined County contracting procedures.

By focusing on these key industry sectors, the County can strengthen relationships and clarify processes. This ensures that the existing community, especially Minority and Women-Owned Business Enterprises (MWBEs), can take advantage of the clean energy transition and are not left behind, while highlighting the value of decarbonizing and electrifying business and labor networks.



Our Progress

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Developed and launched the JumpStart contractor network, offering local businesses clean energy and contracting-focused resource sharing, educational workshops, and direct connections to County staff implementing climate action initiatives across King County.



Collaborated across County departments for largescale outreach events, highlighting contracting opportunities across County projects.



Connected contractors in the JumpStart network to nearly \$2.5 million in King County climate action project contracts.

Goal 2

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Moving Forward

- Enhance and scale business and technical assistance focused on clean energy contractors, including online resource libraries and direct connection to ongoing County climate action projects in the EV charging and building decarbonization sectors.
- Conduct a local industry sector analysis for 2030-2040 to forecast key industries and partnerships for collaboration to support Climate and Workforce Strategy goals.

Action 3.1 Increase contractor education and resources to improve the quantity and diversity of local contractors participating in King County-led clean energy projects

King County initiated a pro-equity contracting initiative in April 2021 through an Executive Order aimed at increasing the participation of MWBE in the Contracting Opportunities Program. In 2024, the Department of Executive Services launched a disparity study to identify policy and program recommendations for improving program delivery. The study's recommendations included increasing communication and outreach to MWBE and small contractor and supplier firms, as well as partnering with other agencies and local organizations to provide technical assistance programs.

As King County and its partners continue to lead the way toward clean energy, there will be opportunities to align pro-equity contracting initiatives with additional opportunities for the local contractor community through contracts with King County for clean energy deployment projects.

Goal 4

To effectively implement these initiatives and meet the County's greenhouse gas (GHG) emission reduction goals, it is essential to have a diverse, skilled, and well-informed contractor base. Through 2030, King County plans to prioritize contractor outreach and knowledge-sharing related to emerging clean energy projects. This includes creating printed and web-based capacity-building resources and making innovative changes to County contracting processes to establish a diverse network of local contractors involved in County-funded GHG emissions reduction work, specifically focusing on electrification and building decarbonization.

Proactive actions to enhance contractor resources include ECO-sponsored workshops on emerging King County projects, County policies, and procedures. Additionally, a resource library of printed and online capacitybuilding materials will be developed in collaboration with local networks. specifically addressing contracting opportunities related to clean energy deployment, such as state, local, and federal programs. Leveraging existing support networks, there will also be enhanced collaboration with the King County Business Development and Contract Compliance Office (BDCC) to connect contractors from the JumpStart network to existing technical assistance for bidding on County projects.



at a JumpStart contractor reception.

Strategy in Action Building the JumpStart Contractor Network

As King County contributes to clean energy deployment in local communities through initiatives like the King County ENERGIZE heat pump program, it has identified a need to create relationships with local contractors to bridge a significant knowledge gap and for government contracting. The JumpStart Contractor network launched in 2024 supports local HVAC, solar plumbing, and electrical businesses with informative workshops and resources about how their companies can benefit from clean energy deployment. The network has grown to support over 20 local businesses in six months and is projected to double in size before the end of 2025.

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Action 3.2 Conduct a localized Industry Sector analysis for emerging high-growth sectors across four county regions from 2030-2040



PHOTO: Key Tech Labs, a local nonprofit, hosting a demo station at the 2023 Green Jobs, Green Futures Summit.

In June 2022, King County commissioned the Seattle Jobs Initiative to conduct an independent industry sector analysis, identifying high-growth green sectors within the County. This analysis examined local industry and market opportunities, workforce trends, and high-demand occupations. It revealed that construction, manufacturing, transportation, and professional services/technology were key high-growth sectors in King County and offered recommendations on

how to integrate these industry, market, and occupational assessments into the development of King County's 2023 Green Jobs Strategy.

Further analysis of key industry sectors will take place in 2029 to inform King County's next Climate and Workforce Strategy update planned for 2030. As the political landscape evolves at the federal, state, and local levels, reassessing local growth sectors for 2030-2040 will be crucial for informing and shaping future partnership development efforts and strategic partnerships in the County.

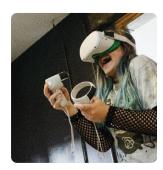


PHOTO: Youth in VR headset exploring virtual solar installation training module at the 2024 Green Jobs, Green Futures Summit.

King County will share the industry sector analysis with County departments and significant regional employers to enhance their long-term workforce planning. The analysis will provide a region-wide overview of key growth sectors and high-demand occupations related to the green economy, enabling proactive, data-driven strategic action.



PHOTO: Former King County Executive, Dow Constantine, addressing business owners and contractors at the 2024 Pro-Equity Contracting Event.

Strategy in Action

2024 King County Pro-Equity Contracting Event

King County ECO, BDCC, Metro, and the Department of Natural Resources and Parks hosted the 2024 Pro-Equity Contracting event at Tabor 100 to connect with the local MWBE community. Over 60 businesses participated in workshops to learn about upcoming contracting opportunities with the County's capital project managers. County staff had the chance to build relationships with a broader network of potential MWBE contractors, share information about upcoming Pro-Equity Contracting projects, and share knowledge with community members about King County's project processes, procurement procedures, and outreach methods including upcoming climate action-focused projects.

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GOAL 4

ADVANCE CLIMATE ACTION IN PARTNERSHIP WITH KING COUNTY EMPLOYEES

King County will harness departmental resources to further develop and expand green career pathways, upskill its workforce through industry-recognized sustainability credentialing, and connect project managers with resources to integrate workforce development into climate action-focused capital projects.

The Opportunity

King County staff are essential to achieving the ambitious climate action goals outlined in the SCAP. As a large organization with a significant workforce, King County has a unique opportunity to upskill its employees with sustainability and energy conservation credentialing, while simultaneously empowering capital project managers to incorporate skills-based training into climate action-focused contracts. This integrated approach will weave workforce and economic development directly into internal County initiatives and projects, maximizing the impact of climate action investments. Doing so will not only require strengthened interdepartmental coordination but also the establishment of long-term funding streams and resource networks to advance skills training and workforce development within capital projects.



PHOTO: 25 Department of Executive Services, Facilities Management Division custodians graduate with certifications from the Green Janitor Health Education Program, through sponsorship from the Green Skills Development Fund.

Our Progress



Developed resources for capital project managers to integrate skills training and career on-ramps directly into capital projects.



Supported over 100 King County employees in accessing sustainability and energy conservation credentialing through the Green Skills Development Fund, doubling the goal outlined in the 2023 Green Jobs Strategy.

Moving Forward

- Complete a feasibility study for a proposed "1% for Workforce" initiative to scale and expand staff capacity and community partnerships for skills trades and career on-ramp opportunities on capital projects across King County.
- Develop a resource guide for County departments to integrate skills training and JumpStart work-based learning into capital projects.
- Publish a contract language library available to capital project managers that provides guidance on integrating work-based learning and skills training into capital projects.
- Launch web-based training videos to share knowledge with capital project managers on effectively utilizing Equity and Social Justice (ESJ) credits within the Sustainable Infrastructure Scorecard.

Action 4.1 Expand the Green Skills Development Fund to lead the scaling up of sustainability and energy conservation credentialing and certifications for King **County employees**

As part of the 2023 Green Jobs Strategy, King County has launched a pilot program for the Green Skills Development Fund. By December 2024, this pilot program had provided energy conservation and sustainability training, including certifications, to over 100 King County employees. County staff collaborated with key labor partners and the Department of Human Resources to design the scope of the pilot. Key certifications offered include the Green Janitor Education Certification, developed by SEIU and the U.S. Green Building Council, as well as the LEED Green Associate and ENVISION sustainability certifications.

In its efforts to enhance workforce skills, King County aims to connect at least 500 employees with energy conservation and sustainability

credentials by 2030. The ECO will work with various King County departments and subject matter experts to identify training and certifications that align with the GHG emission reduction and climate preparedness goals outlined in the 2025 SCAP. At least 50 percent of the training opportunities offered through the Green Skills Development Fund will be recommended by King County departments, while the ECO and other partners may suggest additional training options.

Goal 4

King County is also proud to collaborate with the University of Washington Evans School of Public Policy to develop a report on future certifications and training opportunities for County employees, while exploring ways to scale the Green Skills Development Fund in the future. During listening and feedback sessions, County labor partners expressed a desire to be more involved in promoting the Green Skills Development Fund and to receive updates on its progress. In response to this request, the ECO will provide annual updates in collaboration with the Office of Labor Relations, following the completion of report findings from the UW Evans School in 2025.



Strategy in Action Green Skills Development Fund Pilot

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In 2024, King County piloted the Green Skills Development Fund to help upskill its workforce to meet climate action goals. The ECO worked with departments and County human resources to design the fund and provide training opportunities to over 100 employees across various trainings and certifications. The fund has connected frontline workers and County capital project managers to relevant certifications in their field, including the U.S. Green Building Council's Green Janitor certification,²¹ Envision Sustainability Professional certification,²² and the LEED Green Associate certification.²³ These certifications help County employees across the organization sharpen their sustainability and energy conservation skills to advance climate action in their roles.

- 21 Building Skills Green Janitor Education Program [www.buildingskills.org/green-janitor-education-program]
- 22 Institute for Sustainable Infrastructure Envision Sustainability Professional Certification [https:// sustainableinfrastructure.org/credentialing/envision-sustainability-professional-env-sp/]
- 23 GBES LEED Green Associate Overview [https://gbes.com/credentials-overview/leed-green-associateoverview/

PHOTO: King County Metro employees celebrating

graduation from the Green Custodial Health program.

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Action 4.2 Further develop training resources for capital project managers on how to include workforce development and skills training initiatives, such as paid, work-based learning, into capital projects

As King County advances its goals related to clean energy, there will be opportunities for capital project managers and King County staff to integrate economic and skills training initiatives, such as JumpStart, into applicable phases of project execution more effectively. Integration can improve project results and help communicate the economic co-benefits of climate change and sustainability-informed capital projects to residents and decision-makers.

King County will promote enhanced training and resources within the <u>sustainable infrastructure scorecard's ESJ credit section</u>²⁴ to share best practices. Training resources for capital project managers will improve

outreach, engagement, and the use of credits during the design and construction phases of County projects. The training will include a mix of in-person workshops and online sessions based on the needs of project managers. By 2030, King County aims to develop a robust learning resource network for capital project managers. This network is intended to empower project managers to leverage the economic benefits of their projects by directly connecting members of frontline communities to local projects.

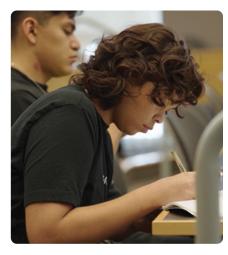


PHOTO: JumpStart participants Laura Garcia and Antwone Escalona attending a climate workshop.

²⁴ King County Natural Resources and Parks Sustainable Infrastructure Scorecard Capital Project Guidelines [https://your.kingcounty.gov/dnrp/library/solid-waste/programs/green-building/sustainable-infrastructure-scorecard-quidelines.pdf]



Strategy in Action Equitable Wastewater Futures Capital Project

As a part of the Climate Equity Capital Pool Project, Public Health Seattle-King County collaborated with the ECO to require the installing contractors in local sewer districts receiving grant funding to update residential on-site septic systems to provide paid, work-based learning to pre-apprenticeship program graduates participating in County programs like JumpStart. The collaboration enabled youth to gain hands-on experience and learn about the essential roles and functions of a local sewer district, which resulted in one of the participating youth being hired full-time by the Valley View Sewer District. This collaboration is an excellent example of capital projects advancing economic opportunity for residents while claiming ESJ credits in their implementation.

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Action 4.3 Strengthen department-level coordination to support implementation of 2025 Climate and Workforce Strategy

During the community engagement and feedback process that shaped the 2025 Climate and Workforce Strategy, employees across King County departments expressed a desire for deeper involvement in the implementation of climate action and workforce initiatives. By integrating department climate action priorities with workforce development efforts, King County can enhance cross-county collaboration and increase its overall impact.

King County plans to develop resources and supportive guidance for departments to implement climate and workforce initiatives effectively. Additionally, the County will conduct resource mapping to track progress in implementing the Climate and Workforce Strategy. The ECO will lead the effort to engage King County employees throughout the implementation phase by organizing employee-focused Climate Action Talks (virtual lunch-and-learn sessions), information sessions to share key insights across departments, and regular interdepartmental meetings to streamline implementation processes and identify best practices.

King County recognizes the importance of leveraging collective resources and professional networks to accelerate the implementation of the Climate and Workforce Strategy. Building connections and collaboration among departments is crucial for meeting the County's climate action and workforce objectives, ensuring their long-term impact.

Action 4.4 Explore establishing a "1% for Workforce" funding stream for skilled trades and career on-ramps tied to County capital projects

King County is committed to clearly articulating the co-benefits of capital projects within the county (this includes County-owned, leased, or financed building projects), especially from a climate change-informed lens. Capital project managers must complete the <u>Sustainable Infrastructure Scorecard (SIS)</u>²⁵ as part of King County's Green Building Ordinance. The scorecard provides a framework for integrating cost-effective, sustainable development practices into infrastructure projects. All capital projects must achieve an acceptable rating regarding King County's ESJ credits, which are designed to advance the County's values regarding economic opportunity and diversity in project design and execution. King County is already leading the way in integrating skills training and workforce development into select projects. However, few enterprise-wide capacity-building resources exist to translate the lessons



²⁵ King County Natural Resources and Parks Sustainable Infrastructure Scorecard Capital Project Guidelines [https://your.kingcounty.gov/dnrp/library/solid-waste/programs/green-building/sustainable-infrastructure-scorecard-quidelines.pdf]

Goal 1 Goal 2 Goal 3 Goal 4

of successful projects across the entire County. With many competing demands, it isn't easy for project managers to become experts in navigating the required partnerships to integrate workforce development while still completing their other duties.

Inspired by the existing 1% for Art Program, 1% for Workforce would create a funding stream to support County-wide resources and capacity-building project support to departments. This funding would make it possible to weave skills training, workforce development, MWBE engagement, and living wage career on-ramps, along with other duties highlighted in the ESJ credits section of the SIS, into applicable County capital projects. Specifically, King County is interested in exploring third-party resources to provide project-by-project assistance to departments as requested, including direct project support, creating resource materials, and partnership development directly linked to implementing ESJ credits within capital projects.

King County will lead a feasibility study to explore a "1% for Workforce" funding framework that would set aside funding equal to at least one percent of applicable agency Capital Improvement Project operating budgets. The funds obtained would be used for activities aligned with the 2023 guidance in the SIS to advance project applicable skills training and workforce development within King County capital projects (i.e., ESJ credits). The study will assess the framework's potential for cost savings, identify eligible workforce development activities and capital project selection criteria, and explore suitable administrative structures for fund management, including potential partnerships and implementation timelines.

The 1% for Workforce framework is an ideal opportunity for King County to lead at the local level on connecting the economic benefit of capital projects (skills training, paid, work-based learning, MWBE contractor outreach, and more) to frontline communities.



CONCLUSION / LOOKING AHEAD

King County is dedicated to making real progress and has a bright vision for 2030, where local jobs and business interests work together to reduce GHG emissions. This vision involves creating durable funding sources to support job training programs focused on climate action and improving pathways for frontline communities to access quality careers. Through capital projects and proactive policies, King County aims to show how tackling climate change issues can lead to economic opportunity.

To make this ambitious vision a reality, King County will expand existing programs to better serve the region and be open to new ideas that change the way it approaches integrating workforce development and climate action goals. The County will work closely with business and labor groups, emphasizing that the shift to clean energy necessary to address the climate crisis is a significant opportunity for economic development.

Over the next five years, King County is poised to continue building impactful partnerships that create living-wage career opportunities for communities experiencing the effects of climate change first and worst. The County will equitably weave frontline communities into the economic benefits of the clean energy transition. To achieve this, it will invest in strong business and labor networks that are crucial for developing clean energy solutions while collaborating closely with County employees to drive effective climate action.

The 2025 Climate and Workforce Strategy aims to connect people across communities with well-paying careers and help create a skilled and diverse workforce. King County's success depends on actively engaging with various groups and building strong partnerships to ensure it not only meets but exceeds the goals of this strategy. That success hinges on turning climate change challenges into valuable opportunities for growth and a sustainable future.



Executive Summary Introduction Community Engagement Goals and Actions Looking Ahead Performance Measures Appendix

PERFORMANCE MEASURES

LOGIC MODEL

Mission: Connect frontline communities to living wage employment opportunities to build a skilled and diverse workforce across the green career spectrum.

GOAL 1

Grow careers and employment opportunities through regional partnerships

King County will prioritize creating quality career opportunities while expanding clean energy initiatives and advancing climate action. King County will partner with the public and private sectors to establish resource networks supporting regional clean energy employment opportunities in frontline communities.

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) ACTION 1.1 WHAT WE WILL DO WHAT WE WILL SEE Integrate workforce development By December 2025, King County will lead the County residents and partners will see a direct integration of contract specific language requiring correlation between climate initiatives and training and employment opportunities employment and training on ramps in our fourinto county climate initiatives. all contractors and sub-contractors performing duties associated with its climate initiatives, such county region through ECO climate projects as ENERGIZE, to act as host sites for JumpStart paid such as ENERGIZE. **RESOURCES** work-based learning opportunities. ECO communicates evidence that JumpStart · Public and private grant funding By December 2025, King County will launch a participation is supporting members of dollars will be utilized to support the sponsored communications campaign to raise frontline communities with access to living implementation and sustainability of awareness and promote the benefits of the JumpStart wage career opportunities with room for the initiatives. advancement and long-term career growth. program, including a dedicated website, news articles, FCO staff time and multimedia resources. Through JumpStart expansion across the · Department of Community and By December 2030, King County will connect 200 four-county region, 200 young adults are Human Services staff time. young adults across the four-county region to connected to employment, resulting in over employment through JumpStart. \$20 million in wages generated within frontline **FOCUS** communities. External

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) ACTION 1.2 WHAT WE WILL DO WHAT WE WILL SEE Collaborate with the Coalition for By December 2027, the ECO will develop funding streams focused on unrestricted private dollars to fund Climate Careers (C3) to fill essential A regional public-private coalition, composed gaps in workforce development service 50 percent of paid work-based learning opportunities of local government, employers, training and education providers, union partners, for youth and middle skill workers within frontline delivery and regional coordination. and community-based organizations, will communities. collaborate to build high-performing workforce **RESOURCES** By December 2028, King County will collaborate with development partnerships, utilizing federal, C3 to develop employer and clean energy contractorstate, and local resource networks and funding. · Public and private funding dollars and led micro grants focused on capacity building and coalition membership contributions business development. from King County **FOCUS**

External

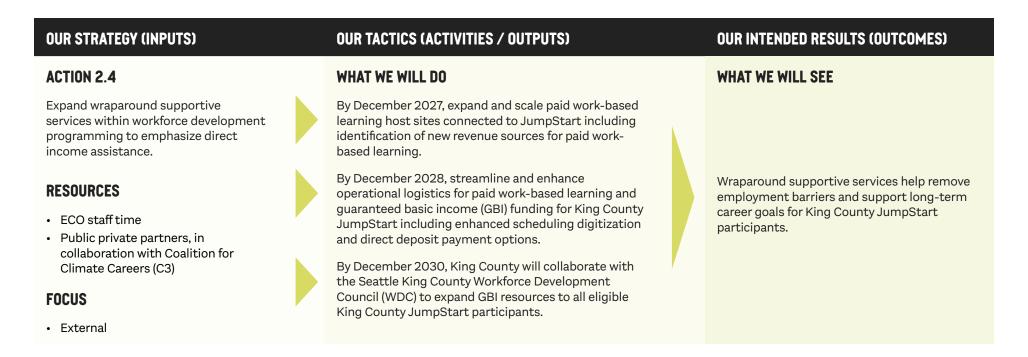
GOAL 2

Build accessible bridges to living wage careers addressing climate change within frontline communities

King County aims to enhance and expand pathways for accessible, living-wage green careers in frontline communities across the region and within its operations.

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) ACTION 2.1 WHAT WE WILL SEE WHAT WE WILL DO Scale and enhance green career By December 2028, participating King County Participating King County departments pathways to recruit from frontline departments will enact green careers pathway implement plans for green career pathway communities most affected by climate implementation plans including but not limited development that align with and support to: dedicated digital interfaces on county websites existing department recruitment while change. highlighting green career pathways positions, a "Green highlighting green career options in frontline Jobs" designated job category on the King County communities. **RESOURCES** public-facing job board, and enabled job alerts for newly Participating King County departments receive created green jobs category. · ECO staff time support in designing and implementing · King County Department of Natural By December 2030, ECO's Climate and Workforce team specialized recruitment events within frontline Resources and Parks staff time will collaborate with participating departments to plan communities highlighting green career and complete no less than twenty (one per quarter) pathways from a climate informed recruitment Department of Executive Services specialized recruitment events and/or social media lens. staff time campaigns highlighting green career pathways within · Department of Local Services staff participating departments. time · King County Metro Staff time **FOCUS** Internal

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) WHAT WE WILL SEE **ACTION 2.2** WHAT WE WILL DO Expand youth and middle-skill worker-By September 2027, the Climate and Workforce team The Green Jobs, Green Futures Summit is oriented outreach campaigns and will expand the Green Jobs, Green Futures Summit to positioned to make a larger regional impact events for early career and high schoolsee a 200 percent increase in attendance (based on on King County, as evidenced by increased attendance and employer engagement. age youth. 2024 Summit attendance data). By December 2030, the Climate and Workforce team Identification and implementation of best **RESOURCES** will partner on outreach for department led initiatives practices in engaging middle-skill workers and to engage youth and middle skill workers on existing youth for recruitment into green careers in · ECO staff time King County on-ramps programs (Parks Youth construction, manufacturing, transportation, conservation corps, SWD deconstruction program, and professional services. **FOCUS** WTD OIT program etc.). An expanded NextGen Climate Internship External Program provides opportunities for young By 2030, the Climate and Workforce team will expand the NextGen Climate Internship program to include adults to work directly with local businesses and organizations to launch careers focused in external host sites, through partnership with trusted local businesses and organizations. sustainability. **ACTION 2.3** WHAT WE WILL DO WHAT WE WILL SEE Conduct a feasibility study to explore KC By December 2026, the Climate and Workforce team Shared understanding on the feasibility of PATH to fill critical and applicable roles will conduct a feasibility study to determine a best fit KC PATH and formalized on-ramps to County within key King County departments. model for KC PATH among select departments and roles for qualified applicants from frontline internal county resource networks. communities. **RESOURCES** · ECO staff time · Department of Human Resources (DHR) staff time · King County Executive Office, Office of Labor Relations (OLR) staff time **FOCUS** Internal



GOAL 3

Invest in building labor and business networks within local high-demand industry sectors essential to clean energy deployment

King County will invest County resources in building labor and business partnerships within existing high-growth sectors to increase access to economic opportunity through climate initiatives.

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) ACTION 3.1 WHAT WE WILL DO WHAT WE WILL SEE From 2025-2030, the Climate and Workforce team Increase contractor education and will host no less than 4 ECO sponsored contractor resources to improve the quantity Equip local contractors with information and and diversity of local contractors workshops per year on emerging King County projects, resources to be prepared to bid on King County participating in King County-led clean policies and procedures. projects focused on clean energy deployment. energy projects. From 2025-2030, the Climate and Workforce team will develop a resource library of printed and web-based **RESOURCES** capacity building resources specifically on contracting Develop relationships and resource networks opportunities tied to clean energy deployment such as to reduce the administrative burden for smaller · ECO staff time state local and federal programs. and MWBE contractors to access clean energy · Department of Executive Service, projects. From 2025-2030, the Climate and Workforce team will Business Development and Contract partner with the Office of Business Development and Compliance staff time Contract Compliance to provide educational resources · Collaboration with community-based and support to contractors in the JumpStart network. organizations focused on contracting best practices **FOCUS** External

OUR STRATEGY (INPUTS)

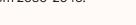
OUR TACTICS (ACTIVITIES / OUTPUTS)

OUR INTENDED RESULTS (OUTCOMES)

WHAT WE WILL SEE

ACTION 3.2

Conduct a localized Industry Sector analysis for emerging high-growth sectors across the four-county region from 2030-2040.



· ECO staff time

RESOURCES

· Independent consultant team

FOCUS

External

WHAT WE WILL DO

By December 2029, the Climate and Workforce team will commission an independent third-party analysis of high-growth sectors. The Climate and Workforce team will concurrently consult with county departments and large-scale employers in the region on their key workforce planning priorities related to the industry sector analysis.



Re-evaluation of the economic landscape projected for 2030-2040 to support investment in newly identified key industry sectors. This re-evaluation will position King County to meet its climate goals through workforce development initiatives tied to highgrowth industry sectors.

GOAL 4

Build accessible bridges to living wage careers addressing climate change within frontline communities

King County aims to enhance and expand pathways for accessible, living-wage green careers in frontline communities across the region and within its operations.

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) ACTION 4.1 WHAT WE WILL SEE WHAT WE WILL DO Expand the Green Skills Development Beginning in January 2025, the Climate and Workforce Fund to lead the scaling up of team will ensure that no less than 50 percent of the trainings and certifications offered though the sustainability and energy conservation The scaling of employee energy conservation credentialing and certifications for King fund be directed by recommendations from county credentialing to support identified emission County employees. departments. reduction goals within the SCAP. From 2025 to 2030, the Climate and Workforce team **RESOURCES** will provide updates on the progress of the Green Skills Development Fund for county labor partners through · ECO Staff Time the Office of Labor Relations. These updates will focus on fund progress, the number of employees served, and King County Department of Natural Coordinated communication regarding Green Resources and Parks staff time new training opportunities available for King County Skills Development Fund outcomes allow staff who are eligible for the Green Skills Development • Department of Executive Services partner labor organizations to recognize the Fund. staff time value of their time and efforts in designing and · Department of Local Services staff promoting the fund. By December 2030, the Green Skills Development fund time will serve no less than 500 employees across county · King County Metro staff time departments including but not limited to DES, DLS, King County Office of Labor Relations Metro and DNRP. staff time · Department of Human Resources Learning and Development Team staff time · King County Executive Office, Office of Labor Relations (OLR) staff time **FOCUS** Internal

OUR INTENDED RESULTS (OUTCOMES) OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) ACTION 4.2 WHAT WE WILL SEE WHAT WE WILL DO Develop training resources for capital By December 2026, the Climate and Workforce team project managers on how to include will develop a resource guide for county departments - specifically Metro, DES, DLS, and DNRP - to integrate workforce development and skills skills training and JumpStart work-based learning into A broad network of learning materials training initiatives, such as paid workavailable to capital project managers for based learning, into capital projects. capital projects. innovative workforce development projects By December 2026, the Climate and Workforce team and partnerships. These connections **RESOURCES** will launch a series of web-based video trainings for create more opportunities for members of capital project managers tied to accessing ESJ credits frontline communities to access economic • King County Capital Project on capital projects. opportunities through capital projects. Management Training Team staff time By December 2027, the Climate and Workforce team will publish a contract language library available to King · ECO staff time County capital project managers on integrating paid • Third party training consultants work-based learning and skills training in their projects. **FOCUS**

Internal

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) WHAT WE WILL SEE ACTION 4.3 WHAT WE WILL DO Strengthen department-By December 2025, the Executive Climate office level coordination to support will begin hosting interdepartmental meetings to County departments can clearly articulate how share updates on Climate and Workforce Strategy implementation of 2025 Climate and their department is able to collaborate with Workforce Strategy implementation. and benefit from the implementation of the Climate and Workforce Strategy. By December 2025, the Executive Climate Office will **RESOURCES** lead in enhancing interdepartmental communication regarding the climate and workforce strategy by · ECO Staff time creating a climate resource hub page for sharing County departments are able to effectively King County Department of Natural interdepartmental updates, resources, and successes. weave their own workforce development Resources and Parks staff time initiatives into Climate and Workforce Strategy By December 2026, King County will create clear Department of Executive Services implementation when they deem it applicable. department guidance on resource mapping and staff time branding for programs and services aligned with · Department of Local Services staff climate and workforce strategy implementation. time · King County Metro staff time · King County Office of Labor Relations staff time Department of Human Resources Learning and Development Team staff time · King County Executive Office, Office of Labor Relations (OLR) staff time **FOCUS** Internal

OUR STRATEGY (INPUTS) OUR TACTICS (ACTIVITIES / OUTPUTS) OUR INTENDED RESULTS (OUTCOMES) ACTION 4.4 WHAT WE WILL DO WHAT WE WILL SEE Explore establishing a "1% for workforce" Shared understanding on the feasibility funding stream for skilled trades and of developing a resource network for King career on-ramps tied to county capital County project managers to fund ESJ credit opportunities tied to advancing economic projects. By December 2026, conduct feasibility study on 1% for justice within the Sustainable Infrastructure workforce frameworks for funding contractor outreach/ engagement, skills training, paid work-based learning, Scorecard (aka Green Building Scorecard). **RESOURCES** internships, connections to unsubsidized employment Identification of sustainable funding streams for persons from economically disadvantaged areas King County Department of Natural to support workforce development, contractor during planning, design and construction project Resources and Parks staff time engagement and long-term workforce phases of county capital projects. • Department of Executive Services planning tied to King County capital projects staff time including those with clear emission reduction goals. · Department of Local Services staff time · King County Metro staff time · King County Office of Labor Relations staff time · Department of Human Resources Learning and Development Team staff time · King County Executive Office, Office of Labor Relations (OLR) staff time **FOCUS** Internal

APPENDIX

CULTURE SHIFT CONSULTING COMMUNITY ENGAGEMENT REPORT
2024 NEXTGEN ANNUAL REPORT



GREEN JOBS STRATEGY
LISTENING SESSIONS AND
FOCUS GROUPS FEEDBACK

REPORT

Prepared by:

Culture Shift Consulting



October 18, 2024



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Executive Summary

The Executive Climate Office (ECO) convened a series of listening sessions and focus groups, the feedback from which will inform the revision process guiding the development of the 2025-2030 Green Jobs Strategy (GJS). Participants included youth, businesses and contractors, community partners, labor partners, key implementers, and King County staff. Key findings for each audience were:

Youth

- Short-term training opportunities like JumpStart enable exploration and provide value by adding new qualifications to their resumes
- Career advancement and earning potential are their top priorities when considering whether to pursue work in a particular sector
- Reaching youth requires a combination of **in-person outreach** through trusted spaces and **digital communication**

Business owners

- Business owners have limited time, and to engage with the GJS they require simple processes and hands-on support on applying for/enrolling in GJS opportunities
- The benefits of programs need to **outweigh the administrative burden** they carry for business owners to participate
- Outreach and communications to business owners appear dependent on relationships with individual King County staff rather than streamlined within and across departments

Key implementers

- Build industry relationships to help translate short-term opportunities such as JumpStart into long-term employment for frontline community members
- Articulate a vision for where short-term programs will lead participants in the long run
- Include summaries of key, relevant points when sharing GJS opportunities or outcomes, paired with opportunities for deeper information sharing and dialogue such as lunch-and-learns

Community partners

- Build on short-term programs by expanding who is eligible and what sectors are included
- Share stories that demonstrate that short-term programs are leading to **long-term, well-paid work** for frontline community members
- Directly share **tailored information** between King County staff and community partners

Labor partners

- Foster reciprocal relationships by collaborating with labor organizations on advancing their own climate priorities
- **Communicate the outcomes** of initiatives that are co-designed or implemented in partnership with labor organizations
- Develop tailored ongoing communications for labor organizations

King County Staff

- Clarify how the GJS connects with their departmental priorities and countywide priorities
- Clarify when departments should tap into GJS resources and when they should use their own departmental resources
- Foster interdepartmental communications about the GJS by developing a shared communications platform (through SharePoint, Teams, etc.) and cross-department meetings to share updates and accomplishments

Common themes that emerged across all audiences

- JumpStart is the most widely known GJS initiative, and participants would like to see ECO expand and scale JumpStart
- Career pathways that demonstrate the potential for long-term opportunities and advancement in the green jobs sector are critical to attract and retain workers
- To amplify the impact of the GJS, King County must remove **barriers** that the County's overarching **contracting and finance processes** create
- A **comprehensive GJS communications strategy** that responds to different audiences messaging and communications needs will require allocating dedicated resources to developing and implementing a communications strategy

Process

The Executive Climate Office (ECO) convened a series of listening sessions and focus groups, the feedback from which will inform the revision process guiding the development of the 2025-2030 Green Jobs Strategy (GJS). The following listening sessions and focus groups took place:

	Audience	Date	# of participants
Listening Sessions	DES/DLS	7/16/2024	2
	DNRP	7/17/2024	11
	Labor partners	7/23/2024	3
	Climate team	7/24/2024	11
	Community partners	7/30/2024	17
	King County Metro	7/30/2024	10
Focus Groups	Youth	8/22/2024	9
	Key implementers	9/17/2024	20
	Business owners	9/19/2024	6
		Total	89

At each listening session and focus group, ECO staff shared a presentation on the Green Jobs Strategy (GJS), including who it serves and key programs that support its goals. Afterwards, Culture Shift Consulting facilitated discussions to gather input on existing GJS initiatives and ideas for the next iteration of the strategy.

Findings

Findings are organized in the following topics for each audience:

- Reactions to the work completed so far
- How the GJS should expand in 2025-2030
- What would motivate them to engage
- Communications and engagement recommendations

Youth

Reactions to the work completed so far

Short-term opportunities such as JumpStart provide young people an avenue to add more qualifications to their toolbox and introduce them to new career pathways.

How could the GJS expand in 2025-2030?

- Build on career pathways and broaden outside of jobs within King County.
- Offer workshops at the end of training opportunities or internships to help young people map what their next steps should be to accomplish their career goals. Help them translate the skills they learned into **resumes** and **job interview responses** that would help them get the next job they need to follow their desired career pathway.
- Incorporate a **shadowing** component in the JumpStart curriculum for participants to learn about other jobs at King County that are in alignment with their career goals.

What would motivate young people to engage more deeply with the GJS?

Youth feel uncertain about their future job stability and are focused on their future earnings and job prospects. For green jobs to appeal to them, they need to understand how they would advance their career and increase their income over time in this field. They would like to deepen their understanding of why the GJS is focusing on the construction, manufacturing, transportation, and professional services/tech industries and what the career pathways and earning potential are in these sectors.

- Leverage social media, particularly **short form videos and graphics**.
- Share information through **newsletters and online portals** that university students access to check assignments and grades.

Business Owners

Reactions to the work completed so far

The JumpStart program benefits both trainees and business owners – it provides trainees a way to gain skills and determine whether it is a line of work they would like to pursue, and for small business owners it can be a way to test expanding their teams.

The \$25/hour wage for JumpStart can be a sticking point. On the one hand, after trainees complete JumpStart, they may find that future job opportunities for their experience level do not pay \$25/hour, particularly in the HVAC field. On the other hand, community partners who support job placements may hesitate to place one of their clients in a physical job for \$25/hour when they could earn \$20-22/hour working in a safer environment (for example, retail).

How could the GJS expand in 2025-2030?

- Providing opportunities for small businesses to **network with large businesses**, so that they can enter prime consultant/sub-consultant
 relationships. This can be a more feasible pathway for small businesses to
 start working with King County and contributes to their economic success.
- Create opportunities for **peer-to-peer learning** for administrative business practices. For example, an established business that has experience documenting prevailing wage for King County contracts will be more easily able to explain how to do this to a small, emerging business than a King County staff person who has never had to do it.
 - While workshops are helpful, some questions require 1:1 support. Offering an individual, one-hour follow-up with the workshop trainer would provide more practical learning.
- Transportation to job sites has posed a barrier for JumpStart trainees participants have observed a gap in hiring post-program for trainees who have a driver's license and reliable transportation and those who do not. Providing trainees with support to obtain their driver's licenses would help close this gap.

- Expand focus from entry-level jobs to also include **career pathways** for more senior jobs, such as engineering and project management.
- Offer training programs that are followed with **small contracts** for graduates to practice their skills right away and demonstrate on-the-job experience.
- Offer trainings about complying with prevailing wage, including examples
 of how businesses track their employees' time in the field, particularly when
 employees are working on different functions that pay different rates all
 within the same shift.
- Offer assistance in responding to RFPs, following the model used for Racism is a Public Health Crisis funding opportunities.
- **Simplify the process to apply for a C-PACER loan** and provide resources such as a phone line to answer questions about filling out applications.
- Create an office that can help small businesses and contractors with the
 administrative tasks required to work on government projects at a
 subsidized rate.
 - Finding a provider to deliver these services can be the greatest challenge; therefore, receiving grant funding would not alleviate administrative burden if it does not also come with a recommendation for a vendor or software to use.
 - Business owners weigh how cumbersome it is to apply for a grant against the benefit they would derive from the funding. When an application is too time consuming or the parameters of how the funds can be used are too narrow, business owners tend to decide against applying.

Overall, business owners felt that simplifying procurement processes should be a priority for businesses and contractors to participate in GJS opportunities.

- Simplify the process for businesses to earn a King County **Small Contractor Supplier (SCS) certification**.
- Reduce wait times from invoicing to payment.
- Reevaluate **insurance requirements** and ensure that they are in alignment with the scope of the project (for example, requiring the same level of insurance coverage for all projects may be prohibitive for smaller businesses).
- Revamp **procurement portal** for better user experience.
 - Participants mentioned the Port of Seattle procurement website as a more user-friendly example. The website does not require log-in before seeing opportunities, it is easily searchable by text rather than contract codes and displays pertinent information such as contract dollar value and contract manager at a first glance.

What would motivate business owners to engage more deeply with the GJS?

Business owners have many competing priorities. Their attention and capacity to participate in programs is greater when processes are simple. Reducing paperwork and streamlining the requirements to access an opportunity will make it more likely for them to participate.

Communications and engagement recommendations

- Focus on sharing opportunities on publications that don't have paywalls, such as Northwest Agent weekly, Tabor 100, and community-based organization newsletters
- Develop partnerships with organizations such as Villa Comunitaria in South
 Park that already implement workforce development programs
- Deepen existing partnerships with organizations that serve as conveners for businesses, such as the Metropolitan Chamber of Commerce with the Business Connector program
- Compile lists of businesses and contractors held by different project managers to develop a more comprehensive email list for sharing opportunities

Key Implementers

Reactions to the work completed so far

Traditionally, entry-level positions have given workers a foothold into long-term, stable employment at King County. Current initiatives like JumpStart provide that initial entry into the workforce, and participants would like to see a similar trajectory for these sorts of initiatives, where they result in long-term careers inside and outside of King County.

How could the GJS expand in 2025-2030?

- Build on **career pathways** work to develop more holistic pathways that are interdepartmental and even interagency. For example, a worker may begin their career in the Department of Natural Resources and Parks and may continue on in another King County department, or at a city government.
- Conduct a **gap analysis** to understand what jobs are available in the market and focus on trainings that build the skillsets needed for those jobs.
- Deepen industry relationships to learn what they are looking for in new employees. Organizations such as Workforce Development Council and Puget Sound Regional Council may offer entry points to broad industry networks.

- Deepen **partnerships with labor unions**, such as MLK Labor and Central Labor Council, and Joint Apprenticeship and Training Committees.
- Bring **Equity and Belonging Managers** into the work to help ensure that initiatives lead to equitable outcomes.
- Seek out like-minded **philanthropic organizations** that may be able to provide funding that is more flexible than government funding.
- Implement direct communications with community members who may be eligible for programs, like **direct mail**.

Key implementers also noted that when new funding is available, King County policy can pose difficulties to using the funding for what is needed. For example, restrictions on how to use funding can make it difficult use funds to bring on new staff. For funding to achieve desired goals, overall King County policy needs to be examined and changed.

What would motivate key implementers to engage more deeply with the GJS?

Key implementers want to understand the long-term vision for GJS initiatives. For example, after someone participates in a short-term program like JumpStart, what is the vision for where participants will be in 6 months, in a year, etc., and what ongoing support will be provided to achieve this vision.

Communications and engagement recommendations

Host a **Lunch and Learn** or **informational series** that highlights the key points in lengthy reports. Be intentional about the audience; it should include people who could truly benefit from an initiative, rather than a catch-all list of every ECO contact.

Community Partners

Reactions to the work completed so far

Existing programs such as JumpStart have been a good starting point to increase opportunities for youth and middle skill workers in green jobs. Now, participants would like to see these programs scale up and a more concrete vision for what happens when someone finishes the program.

How could the GJS expand in 2025-2030?

- After completing the JumpStart program, provide participants with connections to job opportunities or further training that can help them obtain the jobs they are looking for.
- Scale JumpStart to prepare more workers, since the volume of workers needed for the energy transition is enormous. **Expand the sectors that are part Jumpstart.**
- Keep a list of employers categorized by the type of work they do, including small firms, that can be shared with participants after they complete the JumpStart program as a job search resource.
- Research how people in the 18-24 age range seek out and receive information and focus external communications on those channels.
- Start **outreach at a younger age**, at the middle school and elementary school level, to raise awareness of these types of jobs.
- Deepen **industry relationships** so that more workplaces are tapping into GJS initiatives to find workers.
- Include **justice-involved community members** as part of the key audiences that GJS serves.

What would motivate community partners to engage more deeply with the GJS?

Community partners are invested in connecting the communities they serve with quality jobs that pay good wages and offer a respectful job environment. They would like to see examples of success stories that demonstrate programs like JumpStart are achieving that goal.

Communications and engagement recommendations

Create communications that have relevant information for community partners and send them these communications directly.

Labor Partners

Reactions to the work completed so far

Labor partners were engaged in the initial stages of the Green Skills Development Fund and appreciated being invited to collaborate. However, follow up communication was lacking and they did not know how the initiative continued to be carried out.

How could the GJS expand in 2025-2030?

Develop partnerships with labor organizations that have climate justice as a strategic priority and co-create mutually beneficial programs.

What would motivate labor partners to engage more deeply with the GJS?

Labor partners want to know the outcomes of the programs they have helped shape. Ongoing communications to share new developments and results will help keep labor organizations interested in continuing to work on the GJS.

Communications and engagement recommendations

- Host information sessions about programs that are relevant to labor partners, like the Green Skill Development Fund.
- Share information with **union representatives** who can then share it with the broader membership.
- Develop **continuous communications** so labor partners can stay up to date on initiatives that they were involved in and new opportunities that they can share with union members.

King County Staff

Reactions to the work completed so far

Career pathways are key to the success of GJS. Getting workers in the door is the first step, afterwards advancement opportunities are key to keep them engaged.

How could the GJS expand in 2025-2030?

- Build ways for JumpStart program participants to connect with **long-term job opportunities** after the end of their work-based learning.
- Create programs that provide **longer-term temporary positions** than 6 weeks. For example, King County interns report that they get the most out of 1–2-year internships rather than ones that last a few months.
- Create a **container for interdepartmental thought partnership**, where new ideas can be generated and tested before rolling out across King County.
- Create a **pool of funds** that different departments can access to implement projects that advance GJS goals.
- Conduct outreach to raise awareness of green jobs earlier than the 18-24 age range, through high schools. Consider a pathway for **high school students** to start earning certifications for trades, just like there are programs for high school students to take community college courses.

- **Expand the sectors** encompassed by the GJS to include other industries focused on climate preparedness and sustainability.
- Expand the types of jobs encompassed by the GJS to **include professional** careers like engineering, architecture, and sustainability consulting.
- In addition to trainings for specific technical skills, offer trainings in more **general job-seeking skills**, such as preparing for interviews.
- Ensure GJS goals are in alignment with **broader Equity and Social Justice goals** by examining whether the long-term impact of initiatives benefits frontline communities and whether there are unintended consequences.

King County staff have experienced structural barriers to engage with GJS initiatives, such as rigid procurement processes that make it more difficult to contract with community-based organizations and small businesses. Addressing these barriers would require changes to overarching King County policies.

What would motivate King County staff to engage more deeply with the GJS?

King County staff would like for the connections between GJS goals, county-wide goals, and their departments' priorities to be articulated more clearly. emphasized that their ability to support GJS initiatives was contingent on their departmental leadership's buy-in. ECO needs to establish that the GJS advances King County priorities related to the climate crisis, and to emphasize that it is priority for all departments to support the county's work related to climate. a statement from the King County Executive goes a long way to ensure leadership buy-in at the department level.

Project managers see connections with their own departments' goals, and they could use support making these connections clear for leadership so that they can better justify spending their time involved in GJS initiatives. There are strong linkages between skills building and green jobs workforce development and the electrification of King County Metro's fleet, heat mitigation and adaptation projects, and the reduction of greenhouse gas emissions.

There can be confusion about when they should tap into GJS resources and when they should tap into their departmental resources. For example, some departments have funds that fulfill similar functions as the Green Skills Development Fund, and departments have their own workforce development initiatives to diversify their staff. They would like to see both better coordination to streamline these disparate efforts, and guidance about when they should tap GJS resources rather than their own departmental resources.

Communications and engagement recommendations

- Create a user-friendly information base with updates about GJS initiatives and resources such as relevant job listings, a calendar of activities, and outreach materials.
- Host meetings to showcase success stories of different departments tapping into GJS initiatives, including how they were able to get approval to invest time and budget in the work and what community partners they engaged.
- Share **achievements** more often to help justify spending time and budget collaborating with GJS initiatives.
- Explain how each program will lead to the broader goal of increasing frontline community members full-time positions

Common Themes

The following themes emerged across listening sessions and focus groups:

Jumpstart is a valuable program

Of the initiatives that ECO shared in their presentations, JumpStart was the program that had the most existing awareness among participants. Across all audiences, participants saw value in a program like JumpStart that provides an entry point into the green jobs sector.

Participants shared the following ideas to scale JumpStart:

- Expand program eligibility to include other audiences who have been excluded from the workforce, such as justice-involved people community members
- **Expand sectors** that can participate in the program to include employers and/or projects that work more broadly in the climate preparedness and sustainability sectors
- Strengthen the links to long-term employment to make the program more appealing to potential participants

Listening session and focus group participants highlighted feedback around the discrepancy between the wage paid by the JumpStart program and the entry-level wages for long-term positions, particularly in the HVAC sector. JumpStart

wages are higher than typical entry-level wages, which may dissuade participants from continuing to work in the field.

The implication was that JumpStart wages should be adjusted to match the market. However, this would not be in alignment with ECO's commitment to a living wage. Instead, a more values-aligned alternative may be to advocate for market wages to catch up with living wages, and to explore ways to support small businesses with this increase.

Career pathways are critical to attract workers

All audiences emphasized the importance of career advancement to attract and retain workers. For youth, the decision to give the green jobs sector a chance relied heavily on the earning potential and career advancement opportunities that the field may offer. Across other audiences, participants noted that to sustain the number of workers needed for a green energy transition, it is critical for workers who enter the sector to stay in the sector, and they see strong career pathways as one of the main strategies to accomplish this.

To strengthen career pathways, participants recommended:

- Strengthen links between short-term programs and long-term employment through additional resources like job application support and job matching and/or placement support
- Collaborate with employers outside of King County government to develop a **shared vision of career advancement** in these fields
- Develop **stronger industry connections** to help place workers in long-term jobs after they complete short-term programs like JumpStart

Supporting the GJS requires changes in Countywide processes

Participants mentioned that existing King County finance and contracting processes present barriers to achieving the vision of the GJA. Examples included complex contracting processes that make it difficult for small businesses to receive funds from King County and limitations to how departments can use funds generated by programs like the proposed 1% for Workforce.

ECO can help alleviate these barriers by sharing feedback with the appropriate decision-makers and advocating for changes that remove barriers.

Meeting all communications needs requires a multi-channel strategy

Different messages resonate with different audiences, and different audiences are attuned to different communications channels. Serving all these needs will require ECO to develop a comprehensive communications plan and allocate dedicated resources to developing and managing different communications assets and channels.

Communications recommendations summary

Audience	Messages	Channels
Youth	 Young people are entering a challenging labor market and have valid concerns about their future financial stability Green jobs provide a career option with job stability, advancement opportunities, and earning potential to lead a comfortable life In addition to the personal benefits of pursuing a career in the green jobs sector, by working in this field people can contribute to climate change mitigation 	 Partner with colleges and universities to share information through events, on-campus information, college/university newsletters, and existing online portals where students check grades and assignments Establish communication platform (such as a Slack channel) for current and former participants of programs such as JumpStart to network and find opportunities Short-form video content through social media

Audience	Messages	Channels	
Business owners	 Concise explanations of opportunities with clear instructions of how to apply Simple applications; the level of effort required to apply is commensurate with the benefit of the opportunity 	 Community-based organization newsletters Business association newsletters Direct email communications from King County staff 	
Key implementers	 Clear vision for where a short-term opportunity can lead participants in the long run Summaries of key points of relevant initiatives; avoid sending blanket communications that are not applicable or long reports without a summary 	 Direct email communications from King County staff Lunch-and-learn or similar meetings to cover key points and provide opportunity for dialogue 	
Community partners	Summaries of key points of relevant initiatives; avoid sending blanket communications that are not applicable or long reports without a summary	Direct email communications from King County staff	
Labor partners	Summaries of key points of relevant initiatives; avoid sending blanket communications that are not applicable or long reports without a summary	Direct email communications from King County staff to union representatives	

Audience	Messages	Channels
Labor partners	Outcomes of initiatives that labor organizations co-designed or helped implement	 Regular GJS newsletter focused on information relevant to labor partners Informational meetings about relevant initiatives to cover key points and provide opportunity for dialogue
King County staff	 Clear connection between GJS goals and county-wide climate and equity goals Clear connection between GJS goals and departmental goals Celebrations of achievements to demonstrate the value of the GJS Statements from the King County Executive affirming the importance of the GJS 	 Internal shared information repository with resources such as relevant job listings, a calendar of activities, and outreach materials (on SharePoint, Teams, etc.) Informational meetings to share updates and achievements

Executive Summary Introduction Community Engagement Goals and Actions Looking Ahead Performance Measures Appendix

Summary of Key Findings

Audience	Reaction to current work	How to expand	Motivators	Communications recommendations
Youth	Short-term training opportunities enable exploration and adding new qualifications to their resumes.	Conclude programs such as JumpStart with workshops that help translate new skills into future job opportunities.	Understanding the career advancement opportunities and earning potential in the green jobs sector.	Incorporate both digital communications and inperson connection to reach young people.
Business owners	Wages for entry-level positions in certain trades are out of alignment with ECO's definition of a living wage.	Prioritize hands-on learning for business owners to complete the administrative tasks related to contracting with King County.	Programs need to be simple to enroll in and the benefits of participating need to outweigh the administrative burden they pose.	Streamline outreach across all opportunities so that information is not dependent on an individual project manager's contacts.
Key implementers	Short-term programs like JumpStart have the potential to provide entry-level workers a foothold into the industry.	Focus on cross-sector partnerships (government, labor, industry, philanthropy) to ensure training turns into job placements.	A clearly articulated vision for where ECO intends short-term programs like JumpStart to lead in 6 months, one year, etc.	Pull out key points and calls to action from lengthy reports and share through interactive settings like Lunch and Learns

Executive Summary Introduction Community Engagement Goals and Actions Looking Ahead Performance Measures Appendix

Summary of Key Findings

Audience	Reaction to current work	How to expand	Motivators	Communications recommendations
Community partners	Short-term programs like JumpStart are a good starting point to increase access to the sector.	Build on short-term programs by expanding who is eligible and what sectors are included and providing support to connect with long-term opportunities.	Evidence that initiatives are leading to well-paying jobs with respectful work environments for frontline communities	Directly share communications that focus on information that is relevant to community partners.
Labor partners	Initial collaboration on Green Skills Development Fund was productive but would have liked for it to be sustained.	Collaborate with labor organizations that have strategic priorities related to climate justice on developing initiatives that advance the goals of both the GJS and those organizations.	Learning the outcomes of collaborative efforts so labor organizations can see what value came out of their time and effort.	Host information sessions about new programs and share opportunities relevant to union members with representatives.
King County staff	Career pathways are the cornerstone to the success of the GJS, since career advancement will motivate workers to stay in the field.	Deepen the impact of the GJS by expanding the audiences served and sectors encompassed by the strategy, and by creating long-term opportunities for program participants.	Clarity on how the GJS connects with their departmental priorities and county-wide priorities, and clarity on when it is appropriate to use GJS resources versus department-specific resources.	Increase visibility of GJS initiatives and share successes and lessons learned that can enable departments to justify spending time and budget on initiatives.



NextGen Climate Internship **Annual Report**



King County









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INTERNSHIP GOALS & OBJECTIVES

The NextGen Climate Internship Program gives students hands on experience to address and mitigate the effects of climate change on a macro level.

<u>Climate Policy Implementation</u> Through working directly with different teams and projects, interns gained insight into how policy envisioned at the county level gets implemented to incorporate and support communities and stakeholders.

Mentorship & Guidance: Interns were guided by experienced mentors who could offer advice, constructive feedback, and guidance on career development. Additional opportunities to meet with professionals in various stages of their careers in government, policy, and other climate career paths expanded interns' network of professionals.

<u>Career Readiness:</u> Working alongside professionals allowed interns to gain exposure to real-world practices, technical skills and insight, and general education to advance their careers with a focus on government and climate work.

NextGen interns worked on different projects across divisions and teams in King County, working towards advancing action items identified in the Strategic Climate Action Plan (SCAP).



STRATEGIC CLIMATE ACTION PLAN OVERVIEW

King County's Strategic Climate Action Plan (SCAP) is the county's five-year blue print for climate action, integrating climate change into all areas of County operations and work with cities, partners, communities, and residents within King County. The SCAP has three sections

- Reducing Greenhouse Gas (GHG) Emissions section
- Preparing for Climate Change section
- Sustainable & Resilient Frontline Communities (SRFC)

Each intern was placed on a project to a department to help implement a section of the SCAP



OPPORTUNITIES FOR PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT FUND

NextGen Interns receive a professional development budget to spend on opportunities like conferences and symposia, online courses, and certifications, and can be spent on anything that will advance an intern's professional development.

CAREER SPOTLIGHT SESSIONS

Career spotlight sessions give NextGen interns the opportunity to network with climate professionals, both within and outside of King County. In small group settings, interns learn about career journeys, ask questions, and continue discussions through individual coffee chats. Interns are also encouraged to form individual connections with people they meet along the way. Notable career spotlight sessions include the Climate Justice Director for the City of Seattle, Microsoft's Chief Sustainability Officer, and many more.

COURSE CERTIFICATIONS

Interns must complete online courses from Coursera to develop skills relevant to their selected projects. These courses include everything from project management to specific data analysis skills.

PORTFOLIO

Upon completing the NextGen internship, interns present a portfolio showcasing their achievements and learnings to King County employees, offering insights gained during their projects.





ALYSSA YANAGI (She/Her)

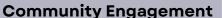
CONNECTING COUNTY AND COMMUNITY EFFORTS THROUGH THE DEVELOPMENT OF THE CONSUMPTION EMISSIONS TOOLKIT

Consumption Emissions Toolkit

A climate resource being developed to support residents, organizations, and businesses in making well-informed decisions to drive action and reduce carbon emissions.

Steering and Managing

- Led quarterly eight-person steering committee meetings to present project progress and discuss collaboration across county, city, and community efforts.
- Consulting the expertise of climate, emissions, policy, and circular economy professionals while developing the Toolkit.



- Engaged with the Re+ Community Panel: residents, workers, and volunteers of King County who have lived experiences as frontline community members.
- Worked with consultant to organize engagement and presentations with Re+ Community Panel members.
- Expanded regional partnerships, engagement, and outreach to community-based organizations, cities, and businesses.



ALYSSA PLAYED A PIVOTAL ROLE IN LEADING AND CONTRIBUTING TO THE KING COUNTY CONSUMPTION EMISSIONS TOOLKIT (CET), IN PARALLEL WITH THE 2025 STRATEGIC CLIMATE ACTION PLAN UPDATE PROCESS. HER SUBSTANTIAL CONTRIBUTIONS TO THE CET WERE INSTRUMENTAL, PARTICULARLY THROUGH HER COLLABORATION WITH AND EMPOWERMENT OF FRONTLINE COMMUNITIES, WHOSE CONSUMPTION REDUCTION EXPERIENCES ARE HIGHLIGHTED IN THE TOOLKIT. ACHIEVING THIS DELIVERABLE WOULD NOT HAVE BEEN POSSIBLE WITHOUT HER!

-NINA OLIVIER, CIRCULAR ECONOMY PROGRAM MANAGER

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Additional Work

- Supported onboarding and turn-over of project work to incoming RES intern.
- Strengthened JumpStart's employer outreach efforts by conducting 27 cold emails and calls.
- Supported JumpStart's Green Futures Summit.
- Obtained certifications in Sustainable Materials Management and Project Management.

ERIN TSAI (They/She)

DESIGNING EVENTS AND EDUCATION CAMPAIGNS TO CONNECT YOUTH TO CLEAN ENERGY CAREERS







As a part of my project, I helped develop engaging events and campaigns encouraging youth to pursue green careers.

Green Jobs, Green Futures Summit

- Created informational packet about the GJGF Summit to provide to potential sponsors, increasing total sponsorship for event from \$12,000 the previous year to \$20,000 this year.
- Analyzed successful poster designs to optimize the visual impact and messaging of the poster for the 2024 Summit.
- Provided key administrative support to the steering committee, including managing communications and tracking project timelines.
- Created comprehensive report about improvements and ideas to implemented for future Summits and events.



-ANOUSHKA ADHAV, CLIMATE & WORKFORCE PROJECT MANAGER

JumpStart

- Designed and implemented a 4-hour climate workshop as part of the 12-hour JumpStart training program. Developed the workshop to educate JumpStart trainees on:
 - Climate Science Basics: Provide a solid foundation in climate science concepts.
 - Climate Justice: Explore the social and environmental implications of climate change.
 - Personal Connection: Empower trainees on their role in addressing climate change.
- Provided key logistical support for JumpStart contractor and hiring events.
- Represented JumpStart at clean energy events and led the program's booth at the GJGF Summit, using VR simulations to engage youth in a creative and interactive way.
- Created content for brand new JumpStart website, ensuring consistent language and messaging.
- Gained certification in project management covering project life cycles, project management methodologies, and leadership skills.



JOHN DUNSTAN (He/Him)

DIVERSIFYING METRO'S ELECTRIFICATION CONTRACTORS

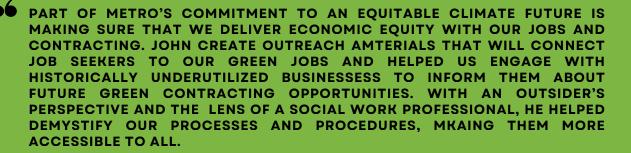
Contractor Engagement

- Researched Historically Underutilized Businesses (HUBs) and Minority and Women-Owned Business Enterprises (MWBEs) around King County
- Attended and supported the Capital Division of King County Metro to meet with prospective contractors to connect them with upcoming capital projects



Community Engagement

- Researched and mapped out apprenticeship pathways to jobs on the south annex base capital projects
- Supported planning and outreach of King County Metro's green job fair through developing materials accessible to people outside the agency, distribution of event flyers around priority hiring communities, and event set-up



-JEN MAYER, ESJ IMPLEMENTATION PROGRAM MANAGER

Additional Work

- Synthesized results of multiple IT project equity reviews; focusing on project achievements, lessons learned, and work still to be done in future projects
- Provided research and facilitation support on the south campus area mobility plan (SCAMP)
- Gained a certificate in Sustainable Cities covering sustainable regional principles, sustainable neighborhoods, sustainable transportation networks, and green construction





PARKER LYNAS (He/Him)

DESIGNING OUTREACH FOR STORMWATER SERVICES

Events & the "Clean Water Connects Us All" Campaign

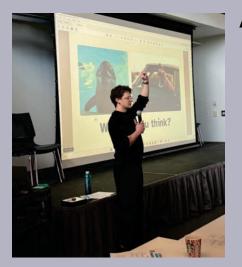
- Researched the connection between mental health, water pollution, and climate change messaging to incorporate into our stormwater campaign.
- Designed communication materials that centered community action and mental health.
 - Included fliers, social media graphics, blog posts, and more.
- Hosted a booth at the Greenbridge Health Fair in White Center, Washington.
 - Showcased "Life of a Drop of Water" by Hernan Paganini, the 2019 Stormwater Artist in Residence. The design was installed using Rainworks invisible paint.
- Hosted a booth at DeafNation Expo in Seattle, Washington.
 - Featured 5 video interviews of King County employees with captions and side-by-side ASL interpretation.
 - Opened the expo with a sign-and-sing along performance of Home by Publish the Quest. This was then followed by a visual vernacular poem.
- Helped facilitate Stormwater's ethnic media tour of Renton's green stormwater infrastructure (GSI).



PARKER WAS ABLE TO TEST THEORETICAL AND PRACTICAL TACTICS FOR COMMUNICATIONS, BUT HIS SHIFT IN UNDERSTANDING FROM THEORETICAL TO EXPERIENTIAL IS VALUABLE TO MAKING DEEPER CONNECTIONS, UNDERSTANDING IMPACT AND INFLUENCE. PARKER'S ENTHUSIASM AND CURIOSITY WIL MAKE HIS FUTURE WORK PERSONALLY ENRICHING, BUT I BELIEVE VALUABLE TO COMMUNITIES HE MAY SERVE. ROCK ON!

-MARY RABOURN, STORMWATER SERVICES COMMUNICATIONS SPECIALIST





Additional Work

- Assisted with the Executive Climate Office's work to revise the Strategic Climate Action Plan.
- Worked with Stormwater Outreach for Regional Municipalities (STORM) to facilitate STORM-Fest and presented at the annual STORM Symposium.
- Attended the Department of Local Services's event for ethnic media representatives: "Local Services wants to speak your language".
- Drafted initial surveys for a self-administered survey on racial equity in the workplace.
- Earned the Plastics: Impacts and Action certificate from Cornell University.
- Attended a conferences on Science Communications and Social Marketing



SUNNY SONG:

Evaluating GHG Reduction Strategies



SCAP 2025

- Updated 2020 SCAP GHG performance measurement tracker to include 2023 and 2024 data points. Coordinated and organized with 17 of staff leads to ensure data updates were complete and trouble shoot barriers.
 - Streamlined quality assurance processes by updating tracking systems to align GHG performance measures and SCAP priority action progress with the latest Biennial Report
- Documented key insights from interactive Climate Team workshops and external 2025 SCAP workshops to inform policy development and strategic planning.

Climate Action Plans

- Conducted comparative analyses of Climate Action Plans (CAP) from C40 and other cities to identify best practices and enhance clarity in plan structures
- Developed a detailed comparison spreadsheet of King Counties-Cities Climate Collaboration (K4C), Climate Action Plan, and Joint Commitment policies to identify overlaps and gaps.
- Created and delivered a presentation highlighting actionable policies King County can adopt to strengthen alignment with K4C commitments.

Additional Work

LEED for Communities

- Led an informational session on SCAP and LEED project to guide King County's recertification process
 - Facilitated applicant interviews and Q&A sessions to evaluate and onboard candidates for the project.
- Developed a comprehensive guideline and workflow plan to streamline project implementation and certification efforts.



UPDATING THE 2025 SCAP IS AN ALL HANDS ON DECK EFFORT. SUNNY'S CONTRIBUTION S WERE A HUGE HELP TO MOVE THIS BODY OF WORK FORWARD.

-CARRIE LEE, GHG REDUCTION MANAGER

THANK YOU FOR THE RIDE

This internship, our experiences, and the projects we completed are owed to the support and insight of our supervisors, professional staff, and community members we have had the pleasure of working with and learning from.

EXTENDING GRATITUDE

Project Supervisors

Anoushka Adhav - Climate & Workforce Project Manager
Carrie Lee - Greenhouse Gas Emissions Program Manager
Jen Mayer - ESJ Implementation Program Manager
Nina Olivier - Circular Economy Program Manager
Mary Rabourn - Stormwater Services Communications Specialist

Intern Supervisor

Michael Carter - Climate & Workforce Manager

NextGen Cohort Lead

Medha Kumar

Career Spotlight Sessions Speakers

Thank you for your continued support of the NextGen Internship Program!

CONTACT

ACKNOWLEDGEMENTS

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KING COUNTY Extreme Heat Mitigation Strategy







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Lara Whitely Binder, King County Climate Preparedness Program Manager Daaniya Iyaz, King County Heat Mitigation Strategy Specialist

Steering Committee

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Other Governments

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Other Agencies and Forums

Aging and Disability Services Advisory Council Byrd Barr Place Community Living Connections ECOSS*

Emergency Management Coordination Council Emergency Support Function #6 Heat Response Workgroup King County-Cities Climate Collaboration

King County Climate Equity Community Taskforce

King County Community Navigators

King County Green Buildings Team

King County Library System

King County Play Equity Coalition

New Buildings Institute

Open Space Equity Cabinet

Puget Sound Energy

Regional Code Collaborative

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Seattle City Light

Seattle Disaster Management Coalition

Sound Cities Association

Sound Generations

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LETTER FROM THE EXECUTIVE

July 2024

King County residents,

2023 was the warmest year on record globally, and 2024 may be even hotter. This June marked the 13th consecutive month of record-breaking temperatures around the world, and once again, extreme heat is affecting millions across the western United States.

Extreme heat is one of the deadliest natural disasters, causing more deaths each year than any other weather event. Higher temperatures lead to increased mortality, stress on our ecosystems, and are often associated with wildfires, which then lead to more devastating impacts.

It has only been three years since the Pacific Northwest experienced the deadly June 2021 Heat Dome, an event that was 150 times more likely because of climate change.

Heat impacts our lives. During the 2021 Heat Dome, 94% of heat-related deaths and 49% of emergency department visits involved residents aged 60 and older. Many groups, often the most vulnerable, are more sensitive to heat, including children, pregnant people, people with cardiovascular disease, people with mental health disorders, and people who take certain medications.

Heat impacts our economy. Illness, traumatic injury, death, and productivity losses associated with extreme heat are estimated to cost Washington state more than \$100 million annually. By 2030, heat-related losses in labor productivity alone are projected to reach around \$100 billion annually across the country.

Heat exposes and exacerbates our inequalities. A King County study found that communities in two different parts of the county at the same day and time can experience as much as a 20°F difference in temperature. The hottest areas in King County have more people with low incomes, seniors living alone, and people with limited English proficiency. A person living in the hottest 40% of the county is more likely to be below 200% of the federal poverty level.

No one agency is solely responsible for reducing heat risk for King County residents. It will take all of us working together. Every community in King County and beyond must grapple with how to mitigate and adapt to the growing threat of extreme heat.

I want to extend my thanks to FEMA and the hundreds of contributors to this strategy, including community-based organizations, subject matter experts, service providers, and local governments.

Together, we can strengthen our region's ability to equitably prepare for more frequent and severe extreme heat events by better protecting our people and places.



Dow Constantine, King County Executive

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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. 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.

All climate scenarios point to hotter summers in King County and the Puget Sound region. Average summer maximum temperatures in King County are projected to be about 3.7 degrees Fahrenheit (°F) (range: 2.5-4.9°F) warmer by the 2030s and 10.5°F (range: 7.4-13.0°F) warmer by the 2080s compared to the 1980-2009 historical average. The likelihood of more frequent and hotter heat waves also increases with climate change. One study found that a heat dome of similar intensity to the 2021 event could happen every five to 10 years with 3.6°F (2°C) of warming.¹

Hotter summer temperatures affect everyone in King County. However, the impacts of that heat are not felt equally. Research, health data from the 2021 Heat Dome, and analyses of King County heat islands (Figure ES -1) show that vulnerability to heat is disproportionately borne by people living with low incomes, unhoused people, seniors, people with limited English proficiency, and people with chronic health conditions like cardiovascular disease and diabetes—factors known to increase vulnerability to extreme heat. Other at-risk populations include children, pregnant people, individuals with mental health conditions, outdoor workers, and households and workers without access to air conditioning or other cooling resources. The overlap between some of the hottest areas in King County and inequities in health, housing, and economic opportunity are most notable in south King County.

The goal of the King County Heat Mitigation Strategy is to equitably reduce the harmful effects of extreme heat on people and places in King County by:



 Effectively preparing for and responding to heat events when they occur,



2. Expanding the use of built and nature-based solutions that reduce extreme heat impacts,



3. Strengthening the resilience of communities most affected by extreme heat.

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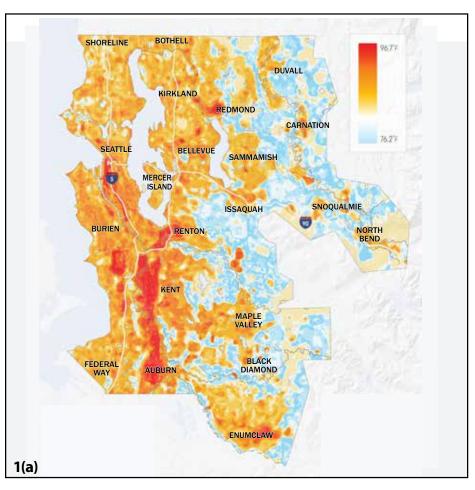
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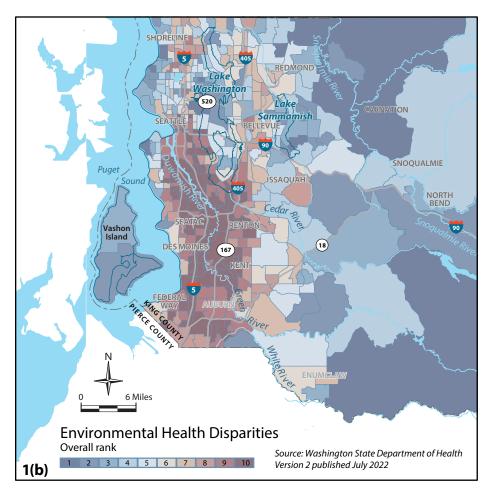


Figure ES-1(a-b). (*left*) King County Heat Island Map. Areas in red and orange on the heat map indicate areas with hotter surface temperatures relative to areas in blue. The hotter areas are referred to as "heat islands". (*right*) Washington State Dept. of Health Environmental Health Disparities map for King County. Aggregate risk ranking for census tracts based on environmental exposures (e.g., fine particulate pollution from diesel pollution and other sources, proximity to roadways); socioeconomic factors (limited English proficiency, no high school diploma, unaffordable housing); and health factors (death from cardiovascular disease, low birth weight). Areas in darker orange indicate locations with greater environmental health disparities compared to areas in dark blue. Mapping of health disparities and other indices show similar spatial patterns. *Figure sources: King County; Washington Department of Health*.

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The King County Extreme Heat Mitigation Strategy was developed to provide strategic direction for local and countywide work on heat mitigation. The strategy was co-developed in collaboration with state and local governments, service providers, community-based organizations, frontline communities, and other partners. The strategy includes 20 actions, shown at right and summarized in Table ES-1, that take a comprehensive approach to preparing people and places in King County for the impacts of hotter summers and more extreme heat events.

Strategy actions complement and build on existing emergency management practices and heat response activities while also leveraging other activities that benefit heat mitigation. Many actions also provide other benefits that go beyond reducing heat impacts, furthering the value of action on heat. Co-benefits can include lower greenhouse gas emissions; building local organization capacity for sustained work on heat; expanded recreation opportunities; workforce development; increased health protection from air pollution and wildfire smoke; and environmental benefits such as improved air and water quality.

The King County Extreme Heat Mitigation Strategy is a five-year plan (2024 – 2029). To successfully address heat resilience in King County communities, this strategy calls on partner agencies and organizations to lead, support, and collaborate on implementation. Partnering with communities disproportionately affected by heat impacts will be particularly important. While the strategy supports heat mitigation efforts across King County, emphasis is placed on prioritizing implementation in identified heat islands, low-income



Help people stay cool and safe indoors: providing in-home cooling support and expanding access to cooling locations, energy efficiency improvements, and utility bill assistance.



Help people stay cool and safe outdoors: supporting drowning prevention, people experiencing homelessness, and occupational heat safety.



Cool our neighborhoods: bolstering urban tree canopy, expanding access to parks and green space, and reducing the formation of new heat islands by preserving existing green space/forested areas.



Design for heat: integrating heat resilience into building and development codes and policies, planning for schools.



Increase heat safety awareness: addressing the need for multilingual heat awareness, communications, trainings, and alerts.



Support heat action: identifying and pursuing sustainable partnerships and funding opportunities for implementation, supporting community-led heat resilience activities related to the strategy.

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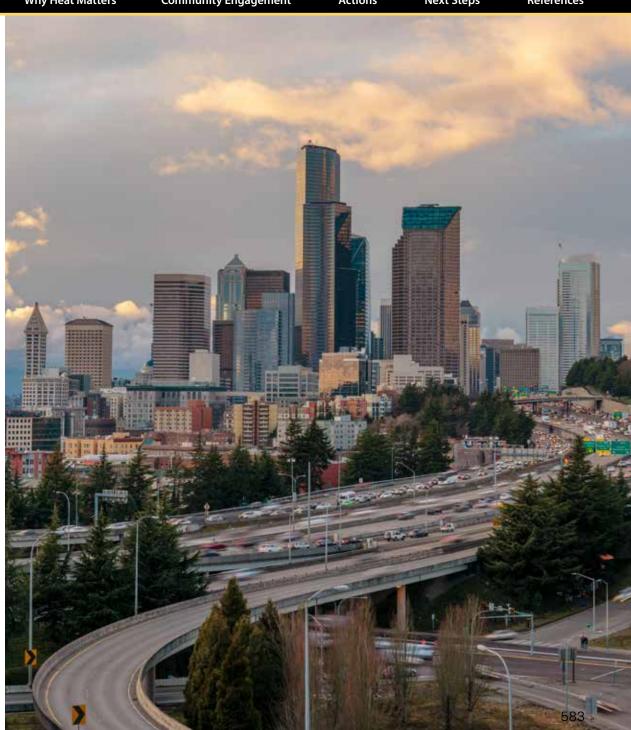
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neighborhoods, communities of color, and other disproportionately affected communities in King County.

Implementing these actions will require ongoing community engagement, sustained partnerships across sectors, and coordination between multiple levels of government.

King County will be the steward of the strategy, tracking implementation and working with stakeholders to leverage opportunities and partnerships, address barriers to action, and evaluate the need for future updates to the strategy. Through this work, we can collectively and collaboratively move towards a future of equitable heat preparedness and resilience in King County.



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Table ES-1. Overview of King County Extreme Heat Mitigation Strategy actions, primary implementers, and alignment with the strategy's strategic priorities.

	1: HELP PEOPLE STAY COOL & SAFE INDOORS	KEY IMPLEMENTING PARTNERS	RELATE	D STRATEGIC P	RIORITY
[6	Action Title	Not Inclusive of all Partners	Heat Prepared- ness and Response	Built and Nature- based Solutions	Community Heat Resilience
1	In-Home Heat Safety: Increase access to portable air conditioning and in-home heat safety support for low-income seniors, people with disabilities, and homebound individuals.	King County, local governments, housing authorities, local service providers, community- based organizations	X		X
2	Energy Efficiency and Utility Bill Assistance: Expand access to weatherization, energy efficiency, and utility bill payment assistance.	Utilities, King County, local governments, community- based organizations		X	Х
3	Heat Pump Installations: Expand heat pump installation programs to cover more households and locations.	King County, local jurisdictions, community-based organizations, local service providers, heat pump vendors & installers, utilities	Х	Х	х
4	Enhanced Cooling Centers: Provide wraparound services to public cooling centers.	Local governments, King County	х		х
5	Community-led Cooling Spaces: Expand cooling location options to include more community-trusted locations.	King County, local jurisdictions, community-based organizations	х		Х

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Table ES-1 (continued). Overview of King County Extreme Heat Mitigation Strategy actions, primary implementers, and alignment with the strategy's strategic priorities.

2	: HELP PEOPLE STAY COOL & SAFE OUTDOORS	KEY IMPLEMENTING PARTNERS	RELATE	D STRATEGIC P	RIORITY
(Action Title	Not Inclusive of all Partners	Heat Prepared- ness and Response	Built and Nature- based Solutions	Community Heat Resilience
6	Drowning Prevention: Promote water safety and drowning prevention through swimming lessons, lifeguard training, and distribution of water safety equipment.	Non-profit , local governments, community-based organizations, King County	х	х	X
7	Cool Kits for Unhoused People: Distribute Cool Kits for unhoused people during heat events.	King County Regional Homelessness Authority, service providers	х		х
8	Occupational Heat Safety: Increase heat safety awareness and preparedness for workers who are more at-risk when it is hot.	King County, community-based organizations, local service providers, Washington Department of Labor & Industries	Х		Х

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Table ES-1 (continued). Overview of King County Extreme Heat Mitigation Strategy actions, primary implementers, and alignment with the strategy's strategic priorities.

	3: COOL OUR NEIGHBORHOODS	KEY IMPLEMENTING PARTNERS	RELATE	D STRATEGIC P	RIORITY
Action Title		Not Inclusive of all Partners	Heat Prepared- ness and Response	Built and Nature- based Solutions	Community Heat Resilience
9	Private Property Tree Care: Develop and promote technical, educational, and financial assistance for tree planting and maintenance to private property owners.	Local jurisdictions and King County	Х	Х	х
10	Maximize Tree Survival: Research, share, and promote best practices tree establishment to increase survival of newly planted trees.	Local jurisdictions and King County	X	Х	Х
11	King County Tree Code Toolkit: Develop and support application of a King County Tree Code Toolkit.	King County, local jurisdictions, and King Conservation District	Х	Х	X
12	Track Equitable Canopy Cover: Assist King County jurisdictions to collaborate and utilize Urban Tree Canopy assessments to identify, track, and strategically address tree canopy inequities.	King County, local jurisdictions, and King Conservation District	Х	Х	Х
13	Open Space Access: Protect, increase and maintain accessible green space, particularly in heat islands.	King County, local jurisdictions, and non-governmental organizations		х	х

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Table ES-1 (continued). Overview of King County Extreme Heat Mitigation Strategy actions, primary implementers, and alignment with the strategy's strategic priorities.

	4: DESIGN FOR HEAT	KEY IMPLEMENTING PARTNERS	RELATE	D STRATEGIC P	RIORITY	
	Action Title	Not Inclusive of all Partners	Heat Prepared- ness and Response	Built and Nature- based Solutions	Community Heat Resilience	
14	Cool Schools: Increase heat resilience of local schools and learning centers through a Cool Schools Initiative.	King County, local jurisdictions, school districts, and early learning facilities	X	X	Х	
15	Building and Development Codes: Reduce heat impacts through effective building and development codes and policies.	King County, local jurisdictions		Х	Х	
16	Heat Smart Parks and Playgrounds: Design and activate parks and playgrounds for heat.	King County, local jurisdictions, community-based organizations, neighborhood groups, private funders		X	X	
	5: INCREASE HEAT SAFETY AWARENESS	KEY IMPLEMENTING PARTNERS	RELATE	RELATED STRATEGIC PRIORITY		
d	Action Title	Not Inclusive of all Partners	Heat Prepared- ness and Response	Built and Nature- based Solutions	Community Heat Resilience	
17	Multilingual Communications: Develop and support distribution of inclusive, multilingual materials related to heat preparedness.	King County, local jurisdictions	Х		Х	
18	Community Heat Preparedness Trainings: Create and administer trainings to help educate communities on heat safety, preparedness, and heat resilience strategies.	King County, community partners	X	X	X	

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Table ES-1 (continued). Overview of King County Extreme Heat Mitigation Strategy actions, primary implementers, and alignment with the strategy's strategic priorities.

6: SUPPORT HEAT ACTION		KEY IMPLEMENTING PARTNERS	RELATED STRATEGIC PRIORITY		
3	Action Title	Not Inclusive of all Partners	Heat Prepared- ness and Response	Built and Nature- based Solutions	Community Heat Resilience
19	Sustainable Partnerships for Implementation: Build partnerships and coordination around strategy implementation and sustainable funding.	King County, local jurisdictions, and local service providers	Х	Х	Х
20	Community Solutions: Uplift communitydetermined solutions through administrative and funding support.	King County, local jurisdictions, philanthropy			Х

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ABOUT THE STRATEGY

In June 2021, the Pacific Northwest and British Columbia experienced an unprecedented heat wave that collectively led to more than 600 deaths from heat-related causes, including 125 deaths in Washington state alone and at least 34 deaths in King County (see box at end of this section).²

Research finds that the 2021 Heat Dome was 150 times more likely to occur and 3.6 degrees Fahrenheit (°F) warmer than it otherwise would have been because of human-caused climate change.¹ Some studies also suggest that a repeat of the 2021 Heat Dome is much more likely under current climate projections.¹

While research on the role of climate change on past events like the 2021 Heat Dome as well as future extreme heat events continues, one thing is clear – climate change is expected to lead to hotter summers and more heat events in King County. Research also finds evidence of heat impacts on health in King County at more typical "hot day" heat thresholds, e.g., the 80s and low 90s °F —temperatures well below the record breaking 2021 Heat Dome.^{3,4} These findings underscore the importance of planning for summer heat as the norm rather than the exception.

The King County Extreme Heat Mitigation Strategy was created to provide strategic direction for countywide work on heat mitigation. This includes work within and across local jurisdictions and organizations in King County. A countywide approach—rather than a focus on King County government action—was taken for several reasons, including the following:

 Extreme heat affects the health and safety of residents throughout King County, creating the need for action across King County's 39 local jurisdictions and unincorporated King County. Efficiencies of scale can be realized by working collaboratively on heat mitigation.

Strategy Goal:

Equitably reduce the harmful effects of extreme heat on people and places in King County by:



 Effectively preparing for and responding to heat events when they occur;



2. Expanding the use of built and nature-based solutions that reduce extreme heat impacts;



3. Strengthening the resilience of communities most affected by extreme heat.

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- Interest in, and local action on, heat mitigation has grown since the 2021 Heat Dome. As more jurisdictions and organizations engage in heat work, the potential for missed opportunities and duplication of effort increases. Having a countywide strategy supports a more systematic approach to heat action, increases partnership opportunities, leverages limited resources, and helps to ensure that our collective efforts are working towards the same goal.
- The time and effort required to develop a local heat mitigation plan can be a barrier to taking action for many local jurisdictions. Developing a countywide strategy removes that barrier, allowing jurisdictions and partners to focus limited resources on implementation.
- King County government is well-positioned to facilitate a broader approach given its role as the local government for unincorporated King County, as the regional service provider for public health, and as a regional convener for countywide action on climate change, urban forestry, land conservation, building and energy code improvements, emergency management, and other issues relevant to heat mitigation.

The heat strategy takes a comprehensive approach to preparing people and places in King County for the impacts of hotter summers and more extreme heat events. The strategy's 20 actions, organized into six categories (shown at right), support a range of near-term heat coping activities as well as longer-term heat preparedness interventions that adapt our built environment and build community resilience.



Help people stay cool and safe indoors: providing in-home cooling support and expanding access to cooling locations, energy efficiency improvements, and utility bill assistance.



Help people stay cool and safe outdoors: supporting drowning prevention, people experiencing homelessness, and occupational heat safety.



Cool our neighborhoods: bolstering urban tree canopy, expanding access to parks and green space, and reducing the formation of new heat islands by preserving existing green space/forested areas.



Design for heat: integrating heat resilience into building and development codes and policies, planning for schools.



Increase heat safety awareness: addressing the need for multilingual heat awareness, communications, trainings, and alerts.



Support heat action: identifying and pursuing sustainable partnerships and funding opportunities for implementation, supporting community-led heat resilience activities related to the strategy.

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Heat strategy actions were co-developed in collaboration with state and local governments, service providers, utilities, community-based organizations, and frontline community members. The actions were also informed by research on projected heat impacts and evidence-based best practices from across the country. Strategic oversight for strategy development was provided by a steering committee consisting of representatives from local jurisdictions, emergency management, public health, frontline communities, and academia (see <u>Acknowledgements</u> for members).

Equity is central to the strategy and is embedded in the guiding principles created for strategy development and implementation. Extensive community engagement with frontline community^a members and organizations helped ensure that community needs and priorities are reflected in the strategy. Actions that are directly responsive to those needs and priorities are tagged for added accountability. Additionally, while the strategy supports heat mitigation efforts across King County, emphasis is placed on prioritizing implementation in identified heat islands, low-income neighborhoods, communities of color, and other communities disproportionately affected by heat. Finally, many of the actions in the strategy involve frontline community-based organizations and service providers as co-implementers. Funding support for their participation in those activities will be needed.

The King County Extreme Heat Mitigation Strategy is a five-year plan (2024 – 2029). The strategy calls on local jurisdictions and partner organizations to lead, support, and collaborate on implementation efforts that can range in scale from individual neighborhoods and communities to all of King County. As a roadmap for action, jurisdictions and partners should use this strategy to guide their own work on heat mitigation while also leveraging the collective learning and collaboration opportunities presented by the strategy to save time and resources.

Heat Strategy Guiding Principles

- 1. Lead with equity in implementation of heat actions.
- 2. Prioritize benefit and access to communities disproportionately impacted by heat.
- Prioritize activities that advance co-benefits.
- 4. Build on existing partnerships and work being done across jurisdictions.
- 5. Advance solutions that support the strategy's goal and strategic priorities.

Developed with input from the Heat Strategy Steering Committee and King County <u>Climate Equity Community Task</u> <u>Force</u> to guide strategy development and implementation.

^a Frontline communities are those communities that often experience the most acute impacts of climate change, face historic and current inequities, and have limited resources and/or capacity to adapt. Source: King County 2020 Strategic Climate Action Plan.

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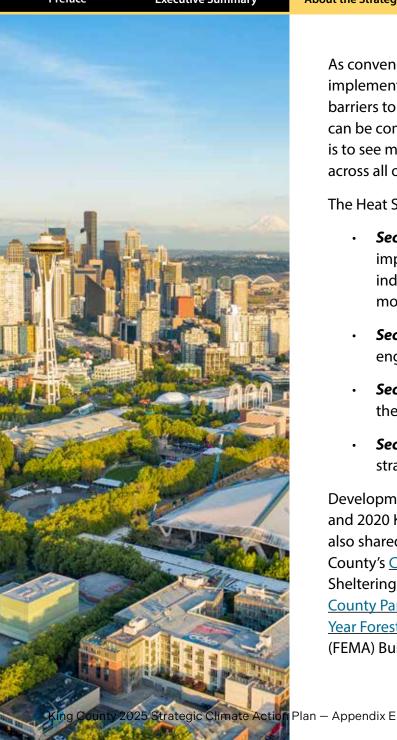
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As convener and author of the strategy, King County will be the steward of the strategy, tracking implementation and working with stakeholders to leverage opportunities and partnerships, address barriers to action, and evaluate the need for updates to the strategy. It is expected that some actions can be completed before 2029 while other actions will take longer to implement. The goal by 2029 is to see more communities engaged in the work laid out in this strategy and to see work happening across all of the strategy's actions.

The Heat Strategy is Organized as Follows:

- Section 2 Why Heat Matters: overview of why heat matters in King County, including the impacts of heat on health, how the built environment and other factors can shape how an individual or community experiences heat, and climate change impacts on the potential for more extreme heat events.
- **Section 3 Community Engagement:** overview of approach and key findings from public engagement with local partners and frontline communities.
- **Section 4 Heat Strategy Actions:** describes each of the 20 actions prioritized for inclusion in the strategy.
- Section 5 Next Steps & Future Considerations: previews next steps for implementation of the strategy other issues for consideration as we move into implementation.

Development of the strategy is a shared priority in King County's 2020 Strategic Climate Action Plan and 2020 King County Hazard Mitigation Plan. The goals and priorities identified in this strategy are also shared in other countywide planning and partnership efforts led by King County, including King County's Comprehensive Plan; Regional Operational Plan for Extreme Weather Centers and Disaster Sheltering; Land Conservation Initiative; Blueprint for Addressing Climate Change and Health; King County Parks, Recreation, Trails and Open Space Levy; Clean Water, Healthy Habitat plan; and the 30-Year Forest Plan. Work on the strategy was supported by a Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities (BRIC) grant and by King County.

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The 2021 Pacific Northwest Heat Dome

From June 25 to July 2, 2021, Washington State and other parts of the Pacific Northwest and British Columbia experienced a major heat wave now referred to as the Pacific Northwest Heat Dome. Over these dates, 124 all-time high temperature records were set across Washington (NCEI-b).⁵ Seattle recorded its warmest temperature on record (108°F), breaking the previous record set in July 2009 by 5°F. Temperatures were equally hot or hotter in other parts of King County, including Kent (106°F), Renton (109°F), Issaquah (116°F), and Maple Valley (118°F). The event also set a new record for the hottest temperature ever recorded in Washington—120°F, set on June 29, 2021 at the Hanford Site in eastern Washington.⁶

The 2021 Heat Dome was 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.⁷ Heat-specified deaths represent only a portion of the impact, however. Statewide estimates counted 441 "excess deaths", or deaths above the predicted amount compared to previous years after removing deaths from COVID-19.^{8,9} Deaths where heat exposure can be a contributing factor include natural causes of death like cardiac arrest or kidney failure, or injury deaths like drownings, transportation accidents, suicide, or homicide.¹⁰

In addition to the increase in premature deaths, the Heat Dome led to an overall increase in stress to the healthcare system in King County. Emergency Medical Services (EMS) typically responds to about 500-600 incidents daily, but June 28 set the record of 1,124 total responses. EMS reported specific increases in heat-related illness, drowning, cardiac arrest and dead on scene responses. EMS personnel also reported increased stress and fatigue, resulting in high occupational risk. 12

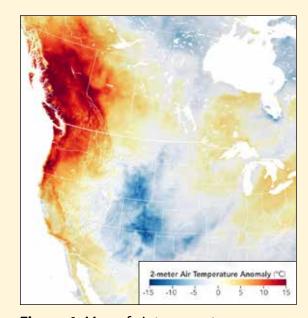


Figure 1. Map of air temperature anomalies in the western United States and Canada on June 27, 2021. Map derived from the Goddard Earth Observing System (GEOS) model and depicts air temperatures near ground level (about 6.5 feet). Red areas are where air temperatures climbed more than 27°F (15°C) higher than the 2014-2020 average for the same day. Figure source: NASA Earth Observatory.

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The highest number of heat-related emergency department visits by King County residents was on Monday June 28, 2021. That day saw 249 visits, accounting for 11 percent of all emergency department visits, compared to the previous peak on June 12, 2019 (less than10 visits). From June 26-July 2, 2021, 557 heat-related emergency department visits were identified; 175 resulted in admission. Compared to the overall King County population, there was a disproportionately higher percentage of heat-related illness visits among American Indian/ Alaska Native and Black residents, as well as by individuals over age 60, who represented more than half of heat-related illness emergency department visits.

The role that human induced climate change played in the 2021 Heat Dome is an active area of study. While the intensity of the 2021 Heat Dome was unusual, the meteorological pattern for the event is a common feature of Pacific Northwest heat waves. ¹⁴ In that sense, more heat domes (regardless of intensity) will occur.

Climate change is likely to have had a big effect on the likelihood of the event and at least some impact on how high temperatures got. One study estimates that the 2021 Heat Dome was 150 times more likely to occur and 3.6°F warmer than it otherwise would have been because of human-caused climate change. While climate change added to the intensity of the heat wave, there is also some consensus that the heat wave's temperatures would have been a record-breaking event regardless given the unusual height of the high pressure ridge in the atmosphere that characterized the Heat Dome. 15-17

Research also suggests that climate change will increase the likelihood of experiencing another heat dome of similar intensity in the future. One study found that a Heat Dome of similar intensity could happen approximately every five to 10 years under a warming scenario of only 3.6°F (2° Celsius).¹

The 2021 Heat Dome demonstrated that deadly heat can occur in today's climate, underscoring the need to be better prepared for extreme heat events as they exist today and with climate change.

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WHY HEAT MATTERS

Extreme heat affects everyone in King County. However, the impacts of heat are not felt equally. Factors influencing vulnerability to heat include where a person lives or works, occupation, income, age, degree of social isolation, and prevalence of pre-existing medical conditions. As we work towards a more systematic approach to managing current and future heat risk in King County, it is helpful to understand why heat matters for health, how the built environment can influence heat risk, and how climate change increases the potential for more extreme heat events.

Heat Impacts on Health

Extreme heat is the number one cause of weather-related fatalities nationally.¹⁸ Current annual losses in Washington State due to heat-related illness and heat-associated traumatic injury, death, and productivity losses are calculated to be between \$111 to \$153 million annually.² By 2030, heat-related losses in labor productivity alone are projected to reach around \$100 billion annually nationally.¹⁹

Heat affects health in complex ways and often at lower ages and temperature thresholds than people assume.⁴ Extreme heat can increase stress on organ systems, increasing the risk of illness and death Figure 2).²⁰ Health effects of extreme heat can include:

- Acute heat illnesses (e.g., heat exhaustion, heat stroke, fainting);
- Exacerbation of chronic disease (e.g., respiratory issues, cardiovascular disease, kidney disease, diabetes, and psychiatric disorders);
- · Adverse pregnancy outcomes (e.g., low birth weight, premature birth); and
- Injuries (e.g., occupational risks, drowning, violence). 20,21

Faint or dizzy Throbbing headache or confusion Excessive sweating No sweating Cool, pale **Body temperature** clammy skin above 103° Hot, red, dry skin Nausea or Nausea or vomiting vomiting Rapid. Rapid, weak pulse strong pulse Muscle cramps May lose consciousness What to do: What to do: · Get to a cooler. • Call 9-1-1 air conditioned place Move person to · Drink water if cooler place fully conscious Cool using cloths Take a cool shower or or bath use cold compresses · Do not give anything to drink

Figure 2. Heat illness and heat stroke symptoms and safety tips. *Figure source: National Weather Service.*

Analysis and supporting details on the health impacts of heat provided by S. Jampel, Hannah Collins, and Brad Kramer (Public Health-Seattle & King County) and the Washington Dept. of Health RHINO team.

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Heat and Homelessness

King County is home to at least 53,000 people who are experiencing homelessness. ²⁸ The unhoused population includes those living in cars, parks, tents, and abandoned buildings as well as those living in temporary shelters provided by homeless service providers, family, or friends. Individuals experiencing homelessness, especially unsheltered individuals, face higher rates of chronic diseases, serious mental health conditions, and substance abuse, all of which can make it difficult for individuals to access cooling when it is hot or take other steps to stay cool. ²⁹ During the 2021 Heat Dome, 11 percent of the 118 heat-related calls to Seattle Fire Department were from people experiencing homelessness. ³⁰

Populations who are more at risk include children and older adults, pregnant people, individuals with chronic health conditions or mental health conditions, outdoor workers, unhoused individuals, and households without access to air conditioning or other cooling resources.

Who is affected by heat, how they are affected, and how harmful those effects are will vary depending on an individual's exposure, sensitivity, and adaptive capacity to heat. Individuals with high exposure, high sensitivity, and low adaptive capacity will be more vulnerable to heat compared to individuals with low exposure, low sensitivity, and high adaptive capacity. Each of these factors is explored further below.

Exposure. Exposure refers to how much heat a person experiences. Individuals who spend prolonged time outdoors, including people who work outside and people who are unhoused, have higher levels of heat exposure relative to individuals who live and work indoors with air conditioning. As a result, those who live or work outdoors may be more at risk of heat illness or other health effects.

Exposure to indoor heat can also be a concern during heat events. Homes, apartments, and work sites without air conditioning or where it may be difficult to keep a space sufficiently cool can lead to high indoor temperatures, providing little relief to people in those spaces and at times exceeding outdoor temperatures. Work environments where indoor heat may pose additional challenges include commercial kitchens, laundries, manufacturing locations, warehouses, and service garages, for example.²²

Where a resident lives, works, learns, or plays is an important contributor to heat exposure. While anyone can be affected by heat regardless of where they live, areas with lower tree canopy coverage and a high concentration of hard surfaces—such as buildings, parking lots, roofs, and roads—will absorb, retain,

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and emit more heat back into the local environment relative to more natural landscapes.²³ These areas will also emit heat back into the environment later into the evening compared to natural areas. This effect can amplify local temperatures, leading to the development of "heat islands" and higher heat risks for communities living in heat islands (Figure 3).²³ Emissions from buildings, industrial facilities, vehicles, and air-conditioning units can add additional heat into the urban environment, further contributing to the heat island effect.

National studies show that heat islands are more likely to be found in low income and majority non-White urban communities with lower tree canopy, fewer parks and greenspace, higher levels of pollution, and worse health outcomes. These disparities stem from a history of discrimination and disinvestment in communities of color, including the legacy of redlining. These same communities also often experience higher rates of heat-related risk factors like cardiovascular disease, respiratory illness, and hypertension. See next section for more on King County's heat islands.

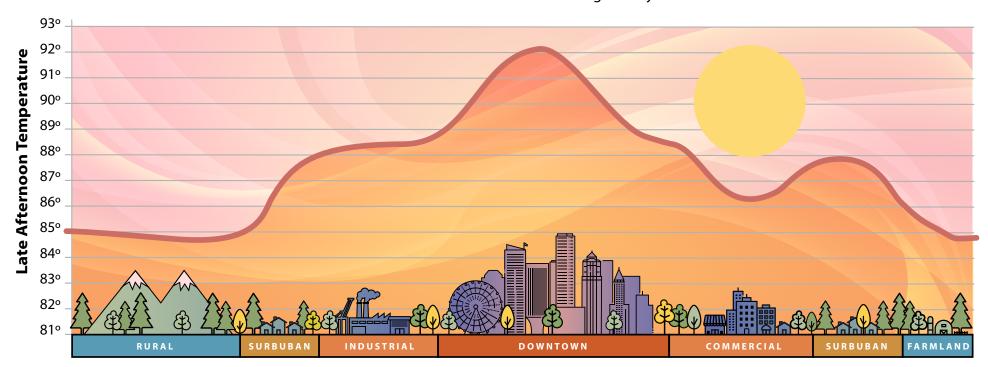


Figure 3. The urban heat island effect. Areas that are more developed typically contain more paved surfaces and fewer trees. As a result, developed areas absorb and retain more heat, increasing surface temperatures more than their surrounding areas.

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Redlining and Urban Heat Islands

Heat islands are often found in areas that have been historically underserved because of exclusionary zoning practices such as redlining.^{24,25} Redlining describes a now-illegal practice from the 1930s where the federal government systematically marked non-White communities as less desirable for housing investment, leading to lenders to deny loans and services to those communities.²³ While redlining was banned in 1968, redlined communities to this day are still more likely to have fewer trees, less greenspace, more impervious surfaces, higher levels of pollution, and worse health outcomes.²⁶ The net result is higher heat in already over-burdened communities. In a national study of 108 urban areas, researchers found that land surface temperatures in historically redlined communities were 4.7°F hotter than non-redlined communities.²⁶ Higher rates of heat-related risk factors like cardiovascular disease, respiratory illness, and hypertension are also more likely to be found in these same communities, further exacerbating the inequitable impacts of heat and underscoring the multi-generational impact of redlining on the health and welfare of communities living in those areas today.²⁵

Figure 4. Map of historically redlined areas in Seattle. The red areas highlighted in the map are places that were deemed hazardous and undesirable for residential investment due to proximity to industrial sites or other factors that reduced property value and attractiveness, including the prevalence of communities of color. *Figure source: Adapted from Mapping Inequality.*



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Sensitivity. Sensitivity refers to an individual's susceptibility to heat. Sensitivity can be driven by age-related traits and other factors. For example, infants and children are more likely to overheat because of under-developed sweat glands. Older adults similarly have a reduced ability to sweat.

Studies show that people with diabetes, obesity, kidney disease, respiratory illness, and mental-illness and/or people or who take medications that alter the body's ability to regulate temperature are more sensitive to heat and therefore may face a higher risk of heat-related illness and death.^{21,26}

Adaptive capacity. The ability, or inability, to adjust in ways that reduce heat impacts is referred to as adaptive capacity. Short term adaptive strategies include visiting a cooling center or air-conditioned location, drinking more water, reducing physical exertion and time in the sun when it is hot, wearing protective clothing (loose fitting clothes, hat, sunglasses), or purchasing air conditioning. An individual's adaptive capacity will depend on factors such as income, occupation, connection to family and social networks, access to healthcare, and whether they rent or own their residence.

Longer term adaptive strategies at the community level include changing building design standards, increasing access to green space, planting or maintaining shade trees, or reducing impervious surfaces.



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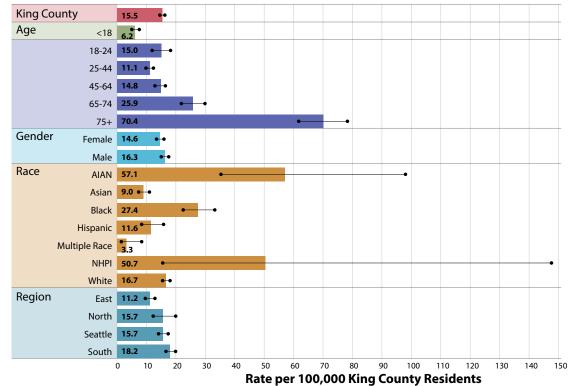
References

Observed Impacts of Heat on Health

Studies show the risk of death in King County on "hot days" (97°F, with humidity) increased by 10 percent,²¹ hospital admissions increased by two percent,³ and emergency medical service calls increased by 14 percent, relative to non-heat days.²¹ Furthermore, those same studies show that all ages can be impacted by heat. Emergency medical service calls for all age groups in King County increased at a relatively normal hot day temperature of 85°F.⁴ Hospitalization risk in King County also increased across many age groups (15-44, 45-64, 65-84, 85+) on high heat days (97°F).³

While heat matters for all ages, older adults are particularly impacted by heat. Forty-nine percent (363 of 741) of emergency department visits and 32 of 34 heat-related deaths in King County during the 2021 Heat Dome involved residents aged 60 and older.¹⁷ Data from Public Health–Seattle & King County²⁷ show that there were 4.5 times as many visits per 100,000 population for adults age 75 or older (70.4) compared to the county-wide average (15.5) between May and September 2021 – 2023, a time period inclusive of the 2021 Heat Dome (Figure 5). Rates for the 18-24 and 45-64 age groups were on par with the countywide average while the rate for ages 65 – 75 exceeded the average.

Rate per 100,000 King County Residents of Emergency Department Visits Involving Heat-Related Illness (May-September 2021-2023)



AIAN = American Indian/Alaska Native

NHPI = Native Hawaiian/Paciÿc Islander

Source: Washington State Department of Health, Rapid Health Information NetwOrk (RHINO)

Figure 5. Rate per 100,000 King County residents of emergency department visits involving heat-related illness May-Sep 2021-2023. Rates are age-adjusted and calculated based on population estimates. Whiskers represent 95% confidence intervals and can aid in comparison between groups. *Figure source: Public Health—Seattle & King County.*

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The data also show the disproportionate impact of heat for non-White communities. Between May and September 2021-2023, American Indian/Alaska Native residents (57.1 per 100,000), Native Hawaiian/Pacific Islander residents (50.7 per 100,000), and Black residents (37.40 per 100,000) experienced significantly higher rates of emergency department visits for heat-related illness relative to the King County average (15.5 per 100,000).

Projected Impacts of Heat on Health

Projected demographic changes in King County point to increased vulnerability to extreme heat events. King County's population is projected to grow by more than 660,000 people by 2044.²⁸ The County's population will also be older—the number of King County residents over age 65 is expected to double from an estimated 305,000 in 2020 to 617,000 in 2050 (increasing from 13.4 percent to 21.4 percent of residents).²⁹ Accommodating this growth in population, combined with an aging population, has the potential to expand heat islands.



Increasing temperatures will add to heat-related health risk in western Washington. 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. Projected heat-related mortality also increased in the east Olympic Cascade Foothills (inclusive of central King County; a 57-133 percent increase) and Cascade Mountains West (inclusive of eastern King County; a 100-200 percent increase). Those in age categories 45–64, 65–84, and 85+ years of age and those with pre-existing conditions like diabetes, cardiovascular and respiratory illness are more likely to see an increase in heat-related mortality. For more on climate change and extreme heat, see Observed and Projected Changes in Heat in this section.

Heat, Equity, and the Built Environment

In 2020, King County partnered with the City of Seattle, Seattle Public Utilities, and CAPA Strategies to better understand how differences in land use, land cover, and geography affect ground-level temperatures in King County. The heat mapping campaign collected real-time, ground-level temperature data across the county on a single day (July 27, 2020) over multiple times of the day (6-7 a.m., 3-4 p.m., and 7-8 p.m.). Data were then used to develop detailed maps of local temperatures, providing clarity on the location and extent of heat islands in King County.

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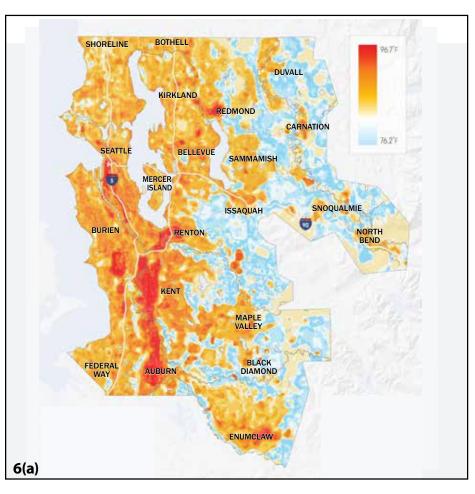
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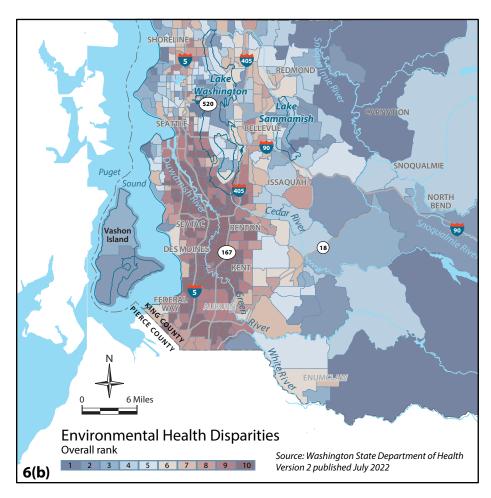


Figure 6 (a-b). (left) King County Heat Island Map. Areas in red and orange on the heat map indicate areas with hotter surface temperatures relative to areas in blue. The hotter areas are referred to as "heat islands". (right) Washington State Dept. of Health Environmental Health Disparities map for King County. Aggregate risk ranking for census tracts based on environmental exposures (e.g., fine particulate pollution from diesel pollution and other sources, proximity to roadways); socioeconomic factors (limited English proficiency, no high school diploma, unaffordable housing); and health factors (death from cardiovascular disease, low birth weight). Areas in darker orange indicate locations with greater environmental health disparities compared to areas in dark blue. Mapping of health disparities and other indices show similar spatial patterns. *Figure sources: King County; Washington Department of Health*.

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Results from the King County heat mapping effort are shown in Figure 6(a). The data show that across some parts of King County, there can be as much as a 20°F difference in temperature at the same time of day based on geography and differences in local factors such as the amount of impervious surface and tree canopy extent.³⁰ Temperatures in the more urbanized western half of King County were warmer overall, particularly in the Kent Valley, relative to the less urbanized eastern half King County. The analysis also revealed that heat islands are not just an urban issue; smaller cities and towns in east King County also have heat islands associated with development.

Another key takeaway from the King County heat mapping results is the connection between heat islands and other environmental and socioeconomic inequities that can affect vulnerability to heat. Similar to national trends, spatial analysis of King County's heat islands confirms that hotter areas of the county have fewer trees and more impervious surface relative to cooler areas (Figure 7b). The analysis also finds a higher proportion of people living with low incomes, seniors living alone, people with limited English proficiency, and cardiovascular disease in hotter areas of the county (Figures 8a-d).

Heat-related health risks for residents living in heat islands can be made worse by other environmental challenges. Figure 6(b) shows a strong spatial overlap between some of the hottest areas in King County and areas with high environmental health disparities identified by the Washington State Department of Health.^b Many of the same activities that contribute to the heat island effect in urban areas (e.g., high traffic volumes, industrial activities) contribute to higher concentrations of local air pollution, including nitrous oxide and fine particulates, and other sources of pollution. Fine particulates from wildfire smoke events can further exacerbate adverse health impacts during heat events, particularly in overburdened communities. The overlap between heat and environmental health disparities is most notable in south King County, where there is a higher percentage of people of color, limited-English-speaking communities, immigrant/refugee communities, and people living with lower incomes.

b The Washington State Department of Health Environmental Health Disparities map provides an aggregate risk ranking for census tracts based on environmental exposures (e.g., fine particulate pollution from diesel pollution and other sources, proximity to roadways); socioeconomic factors (limited English proficiency, no high school diploma, unaffordable housing); and health factors (death from cardiovascular disease, low birth weight). Mapping of health disparities and other indices show similar spatial patterns.

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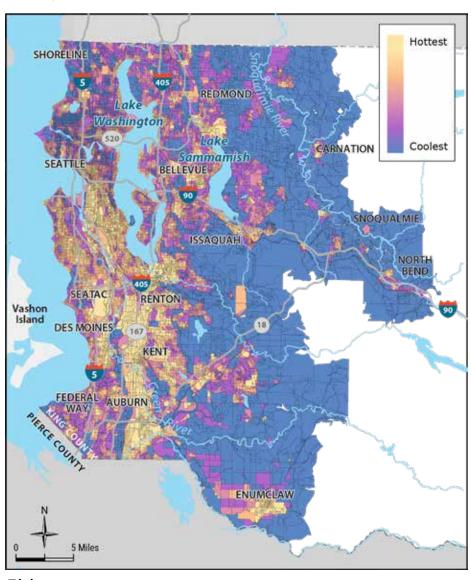
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County-wide Snapshot



7(a)

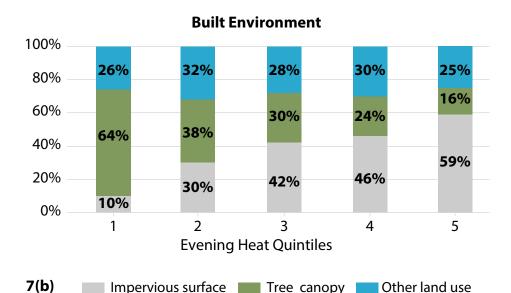


Figure 7(a). An analysis of the evening temperatures heat map from 4(a). The analysis aggregated heat mapping data to the census block level to support comparisons with existing health and environment data. The temperature data was split into quintiles (20% segments) with the coolest temperature (lowest 20%) represented by blue and the hottest temperatures (highest 20%) represented by yellow.

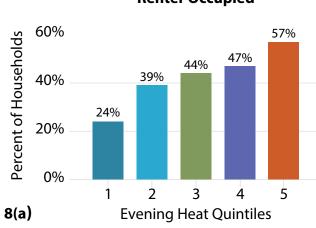
Figure 7(b) shows how the amount of impervious (paved) surfaces increase and tree canopy coverage decreases in hotter areas of the county.

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Percent of Population below 200% of the Federal Poverty Level

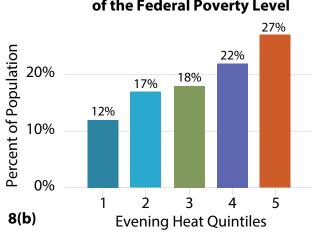
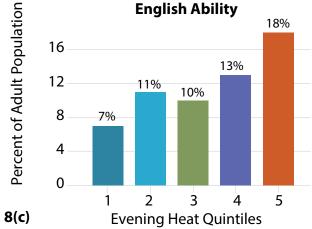
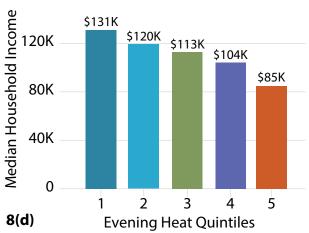


Figure 8(a-d) depicts how renteroccupied households, people below 200% of the federal poverty level, and adults with limited English ability increases (a - c) and median household income decreases (d) in hotter areas of the county. Quintiles ordered from coolest (1) to hottest (5).





Median Household Income



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Who lives in the hottest areas of the County?

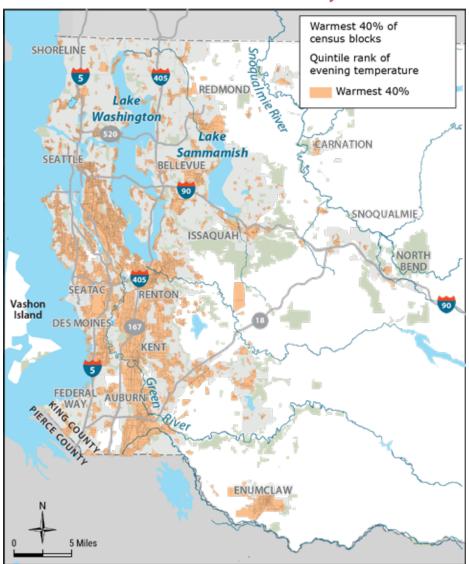
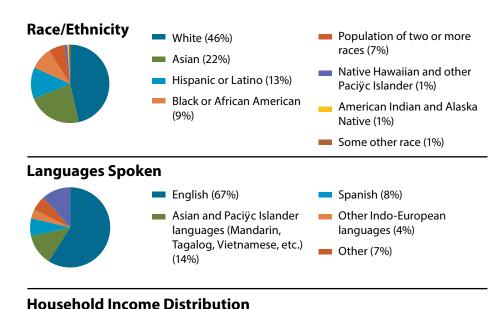


Figure 9(a). Map of the hottest 40% of the county, based on aggregating base heat map (Figure 6) to the census block level (Figure 7a).





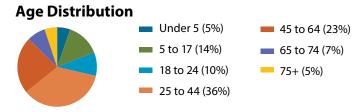


Figure 9(b): Demographic breakdowns of people living within the hottest 40% of the county by race/ethnicity, spoken languages, income, and age.

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When compared to the King County average, a person living in the hottest 40% of the county would be:

- 37% more likely to be below 200% of the federal poverty level
- 34% more likely to have limited English ability
- 18% more likely to rent their home
- 17% more likely to have a disability
- 9% more likely to have diabetes

The hottest 40% of the County contains approximately:

- 163,037 single-family homes; 8,600 multi-family homes; 3,287 mobile homes; and 1,431 condos
- 210 K-12 schools and 106 daycares
- 144 senior citizen facilities
- 44 libraries
- 30 hospitals

Note: Exact building counts are difficult to obtain, so these counts may not fully reflect all buildings within the hottest 40% of the county.





Figure 10. Impervious surfaces and low tree canopy coverage are key factors contributing to higher temperatures in King County heat islands. *Photo source: King County*

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Observed and Projected Impacts of Heat

Observed Trends in Summer Temperature and Heat Waves

The NOAA National Centers for Environmental Information maintains long-term records of county-average temperature data beginning in 1895 (NOAA NCEI Climate at a Glance).³¹ Analysis of those records finds that summers (June through August) are getting warmer in King County and across western Washington, although how much warming has occurred depends on what is being measured, where it is being measured, and over what time period. Key findings include the following:

- temperature for June through August in the Puget Sound lowlands increased 2.5°F between 1895 and 2023 (NOAA NCEL Climate-at-a-Glance) (Figure 11).³ This is comparable to the increase in average summer temperature for Washington state for the same period (+2.6°F).
- Summer daytime temperatures have been rising since 1980. Summer maximum temperatures, which typically occur in the afternoon, increased 2.6°F on average in King County between 1980 and 2023. There is no statistically significant long-term (1895-2023) trend (Figure 12a).

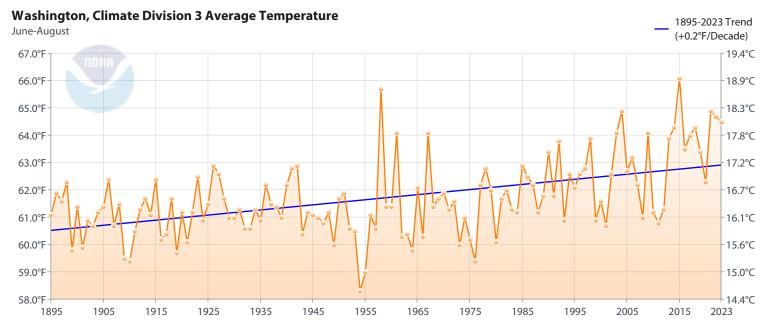


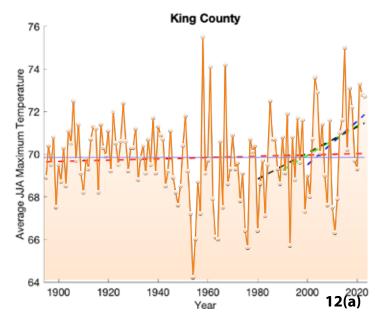
Figure 11. Long-term trends in summer (June-August) temperature for the Puget Sound lowlands, 1895-2023. Year-to-year average annual summer temperature shown in orange. Blue line shows the long-term linear trend for the entire period of record. Figure source:

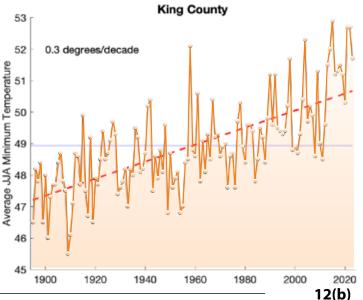
NOAA National Centers for Environmental Information (noaa.gov)

 $Analysis\ and\ supporting\ details\ for\ this\ section\ provided\ by\ K.\ Bumbaco,\ Office\ of\ the\ Washington\ State\ Climatologist.$

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- risen significantly. Summer minimum temperatures, which typically occur at night, increased about 3.5°F between 1895-2023 (Figure 7b) and 2.7°F for 1980-2023 in King County. Elevated nighttime temperatures are important because they limit the potential for homes to cool and people to recover after hot days, often worsening poor health outcomes. While development may be a contributing factor over time in some urban locations in King County, this trend in warmer nighttime temperatures is consistent with Washington trends as a whole (including rural locations).
- Some warm season months (May-September) have gotten notably hotter while changes in other months are less clear. Maximum temperatures for August and September in King County increased 1.8°F and 3.0°F, respectively, on average between 1895 and 2023. Trends in maximum temperatures for May, June,





Summer (Jun-Aug, or "JJA") maximum temperatures (top) and minimum temperatures (bottom) for King County from 1895-2023. The linear trend line for the entire period of record is the dashed red line. The blue line is the average for the period of record (1895-2023). Trends in maximum temperature for more recent periods are shown as follows: 1980-2023 (dashed black line), 1990-2023 (dashed green line), and 2000-2023 (dashed blue line). Recent years show more warming in maximum summer temperatures. Figure source: K. Bumbaco, Office of the Washington State Climatologist using NOAA NCEI Climate at a Glance; accessed February 27, 2024.

Figures 12(a) and (b).

^C The increases in maximum temperatures observed in August and September compared with earlier in the warm season are consistent across Washington state and may be related to declines in summertime precipitation, at least over the last few decades. Additional research on this potential connection is needed.

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and July are not statistically significant. In contrast, summer minimum temperatures have warmed significantly for May, June, July, August, and September since 1895.

Trends in summer heat waves also vary. Heat waves can change in terms of magnitude (how hot it gets during a heat wave), duration (how long a heat wave lasts), and frequency (how often a heat wave occurs). While there is no single definition of a heat wave, a common definition is the number of consecutive days or nights above a given temperature percentile.^d

Trends for two percentile thresholds—the 95th and 99th percentile—and two absolute temperature thresholds locally—85°F and 90°F—show an increase in the frequency of some types of heat waves (daytime versus nighttime), while others do not show an increase. More specifically:

• Nighttime heat waves are occurring more often across western Washington. The number of warm nights per summer and frequency of warm night heat waves have increased in western Washington.7,32 This finding is true for different thresholds (95th or 99th percentile) and baseline periods (1901-2009, 1920-2021). There have been no significant long-term changes in the duration or magnitude of nighttime heat waves at this point, however. It is important to note that temperatures can vary substantially throughout King County in association with local effects related to the geography and the built environment. As noted previously, temperatures on a warm summer day can vary by as much as 20°F across the county based on differences in land use, land cover, and geography. King County locations closer to water and/or with more natural landscapes tend to be cooler during a hot day relative to locations with more development and/or farther away from Puget Sound, such as Kent, Auburn, Maple Valley, Duvall, and Carnation. Averaging temperatures over the entirety of King County can therefore mask important differences in local temperatures.

There is evidence of increasing local trends in heat but no long-term trend in daytime heat waves. There is no significant, long-term increase in the frequency, magnitude, or duration of daytime heat waves averaged over western Washington and western Oregon7 or in western Washington alone. Nevertheless, there is evidence of increasing daytime heat locally. For example, observations at Seattle-Tacoma International Airport and show a statistically significant increasing trend in the number of days 85°F or above and 90°F or above for 1945-2023 (Figure 13).

^d A percentile definition is more closely aligned to the climatology of a location, since people in milder climates might have a lower threshold for what constitutes a heat wave.

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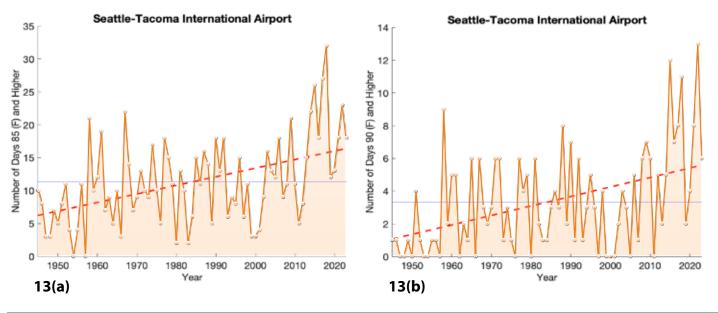
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Projected Changes in Summer Temperature and Heat Waves

All climate scenarios point to hotter summers in King County and the Puget Sound region. It is also very likely (greater than 90 percent probability) that heat waves will increase in frequency, severity, and duration across the United States.³³ Average summer maximum temperatures in King County are projected to be +3.7°F (*range: 2.5-4.9°F*) warmer by 2020-2049 compared to the 1980-2009 historical average (Figure 14).^e By the 2080s, average summer maximum temperatures exceed 80°F, warming +10.5°F (*range: 7.4-13.0°F*) relative to the historical average. This increases the likelihood for more and hotter heat waves.

Changes to extremely warm days and nights are shown through a measure known as humidex. Similar to the heat index, humidex is a measure of temperature and humidity used to describe the combined effects of heat and humidity on the human body.³ Projections indicate 10 more days (*range: 6-13 days*) with a humidex above 90°F for 2020-2049 compared to the average for 1980-2009 (Figure 15). By late century (2070-2099), projections show 40 more days (*range: 24-59 days*) exceeding the 90°F humidex threshold in King County.



Figures 13(a) and (b): The annual number of days 85°F or above (left) and 90°F or above (right) at Seattle-Tacoma International Airport from 1945-2023. Both increasing trends are significant at the 95% confidence level. The blue line is the average for the period of record (1945-2023). Figure source: K. Bumbaco, Office of the Washington State Climatologist using NOAA NCEI GHCNd; accessed February 27, 2024.

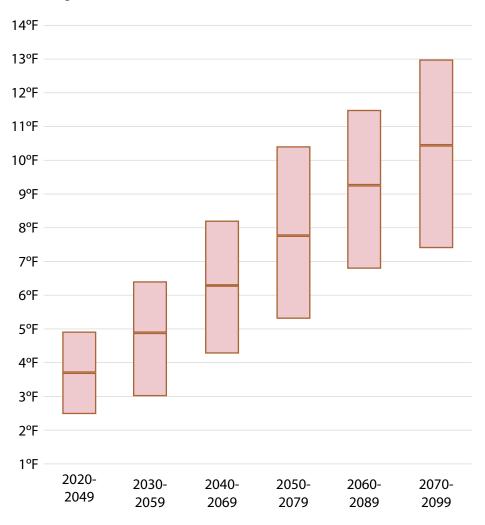
e The temperature and extreme heat projections highlighted here are from the University of Washington Climate Impacts Group's <u>Climate Mapping for a Resilient Washington</u> web-based tool.³⁴ Unless otherwise noted, all projections are based on a high emissions scenario (Representative Concentration Pathway 8.5). Prior to 2050, differences among greenhouse gas scenarios are relatively minor, whereas the results for later in the century can be significantly affected by scenario choice.

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King County, Washington Change in Average Summer (June-Aug) Maximum Temperature

Higher Scenarion (RCP 8.5); Historical (1980-2009) Value: 70.5°F



The number of warm night heat waves is also projected to increase. Specifically, nights with a humidex above 65°F in King County are projected to occur on seven more nights (*range: 3-12 days*) by 2020-2049, relative to the average for 1980-2009. By late century (2070-2099), projections show 45 more nights (*range: 18-71 days*) exceeding the 65°F humidex threshold in King County. Elevated nighttime temperatures are important because they limit the potential for homes to cool and people to recover after hot days, often worsening poor health outcomes. Nighttime heat exposure has been shown to add stress on the human body even when controlling for daytime hot temperatures.

How much and how quickly summer temperatures increase as a result of climate change will depend on how quickly global greenhouse gas emissions are curtailed. While not listed as an action in this strategy, local action to reduce greenhouse gas emissions is part of a comprehensive heat plan. Many heat mitigation actions, including urban greening, preservation of forested areas, and a focus on energy efficiency, also benefit emissions reduction. See <u>Actions</u> for more on heat mitigation approaches and co-benefits.

Figure 14. Projected change in average summer maximum temperature (June-August) for King County based on a high greenhouse gas emissions scenario (RCP8.5). The solid, red line in each rectangle represents the model median while the rectangle encompasses the 10th and 90th percentile range of the individual model projections. *Figure source:* <u>Climate Mapping for a Resilient</u> <u>Washington, University of Washington Climate Impacts Group.</u>

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King County, Washington Change in Days with Maximum Humidex Above 90°F

Higher Scenarion (RCP 8.5); Historical (1980-2009) Value: 5.2 Days

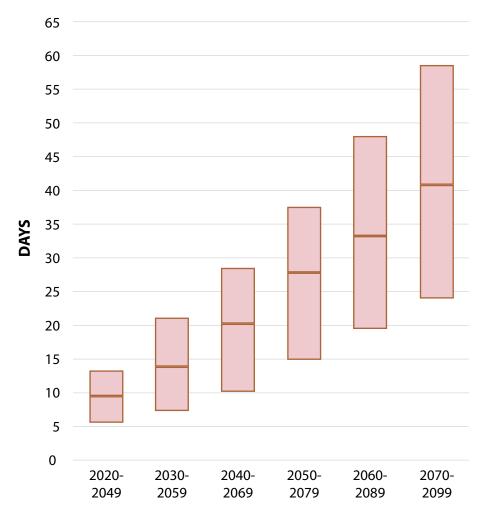




Figure 15. Projected change in the number of days above a maximum humidex of 90°F (32.2°C) for King County based on a high greenhouse gas emissions scenario (RCP8.5). The solid, red line in each rectangle represents the model median while the rectangle encompasses the 10th and 90th percentile range of the individual model projections. *Figure source:* <u>Climate Mapping for a Resilient</u> Washington, University of Washington Climate Impacts Group.

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Engagement Methods

King County conducted extensive outreach with local governments, community-based organizations, frontline community members, and other partners to identify and prioritize actions for the strategy. Engagement activities included workgroups, focus groups, community surveys, tabling events, subject matter expert briefings and consultations, and interviews. The County's engagement approach was rooted in a commitment to ensure the strategy addressed the needs of those most affected by heat. The engagement approach also reflected a goal of building partner awareness and support for the work outlined in the strategy. In total, more than 900 people were engaged in the process (Figure 15).

Strategy Workgroups

King County convened four workgroups, described below, to identify and prioritize actions related to specific topic areas or lived experience. Each workgroup provided a range of subject matter expertise, critical perspectives, and lived experience to guide action development, to identify implementation details and partners, and to ensure alignment with core strategy values and principles. Existing groups were utilized where possible to reduce duplication of effort and build sustained connections for implementing strategy actions.

 Community Partners Workgroup. Created specifically for this strategy, the Community Partners Workgroup consisted of eight frontline community-based organizers from across King County (see Acknowledgements for participating members and organizations). Workgroup members identified and prioritized frontline community priorities, developed action concepts to address community needs, and identified equityrelated considerations for action implementation.

- Urban Forestry Forum Workgroup. The Urban Forestry Forum Workgroup consisted of 11 urban forestry professionals recruited from King County's recently established Urban Forestry Forum (see Acknowledgements for participating members and organizations). The Forum serves as a platform for King County and its 39 municipalities to share information, strategies, industry standards, successes, and challenges related to urban forestry. More details about the Forum can be found in Action 11: King County Tree Code Toolkit.
- Heat Response Workgroup. Created specifically for this strategy, the Heat Response workgroup consisted of more than 40 county and local jurisdiction staff from across King County with expertise and/or interest in emergency management. The Heat



Response workgroup was convened to identify needs and opportunities related to topics such as extreme heat communication and outreach, supporting heat-sensitive populations, heat relief supplies distribution, and cooling center organization.

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U.T.O.P.I.A Heat Strategy Focus Group



Heat strategy focus groups (top, bottom) hosted by the Chinese Information and Services Center



Tabling at Issaquah Welcome Week



Tabling at the Rainer Beach Community Center

Figure 16. Engagement activities related to heat strategy development.

Photos source: King County

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Regional Code Collaborative. The Regional Code Collaborative (RCC) is a multi-jurisdictional group of more than 95 code officials and planners from across King County who work together to develop and update green building codes for local adoption. A subgroup of more than 25 RCC participants were engaged to discuss how building codes can be updated to include heat resilience and to identify additional built environment strategies to mitigate extreme heat.

Frontline Community Member Focus Groups

King County staff hosted seven focus groups with frontline communities who live in identified heat islands:

- High school youth (host partner: Foster High School, Tukwila) (two focus groups)
- Chinese immigrant community seniors and young families in the Seattle Chinatown/International District and in Renton (host partner: Chinese Information Services Center) (two focus groups)
- Queer and trans Native Hawaiian/Pacific Islander community members (host partner: U.T.O.P.I.A. Washington) (one focus group)
- People experiencing homelessness (Seattle, Auburn; host partners: King County Regional Homelessness Authority, YMCA) (two focus groups)

Focus groups created a forum for hearing directly from community members about their experiences with extreme heat and community priorities and ideas for reducing heat risk. The focus groups also provided opportunities to share information and resources on heat preparedness with participants and partner organizations.

Focus groups were planned, organized, and facilitated in partnership with community-based organizations and service providers. Up to 20 community members participated in each focus group. Where relevant, focus groups were held in-language or translation was provided.

Other Engagement Activities

Interviews with 14 local jurisdictions^f in King County were conducted early in the strategy development process to learn about current priorities or plans for addressing heat and what would make a countywide heat mitigation strategy useful to their work. Additional local government outreach included engagement with city managers, elected officials, and local government staff participating in the Sound Cities Association and interviews with other local and state government subject matter experts.

Other outreach events included tabling at community events, surveys, and virtual discussion sessions. When tabling, County staff distributed multilingual heat safety information and conducted "dot exercises" to better understand community challenges, priorities, and preferred interventions regarding extreme heat. Virtual outreach sessions included brainstorming activities and discussions around challenges and desired interventions related to extreme heat. Outreach was prioritized in communities that face risk during extreme heat events.

[†] Interviewed jurisdictions: Bothell, Burien, Issaquah, Kent, Kirkland, Maple Valley, Mercer Island, North Bend, Redmond, Renton, Sammamish, Seattle, Shoreline, Tukwila.

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Engagement Findings

Communities are concerned about extreme heat.

Residents of all ages, ranging from seniors to youth, expressed concern for themselves, their families, community members, and the environment during extreme heat events. In a survey conducted in the Chinatown-International District, 96 percent of 120 respondents stated they were concerned about heat at some level. Along with the health impacts of heat, many engagement participants noted inequities in how people are exposed to heat, the magnitude of health impacts, and access to cooling resources.

Residents face challenges with staying cool at home.

Most residents prefer to stay at home during periods of extreme heat even though many reported significant challenges with comfort and health due to inadequate cooling options at home. Residents and community organizers identified cost of purchasing, installing, and operating cooling equipment as the leading barrier to home cooling What limitations prevent you from using or upgrading cooling options inside your home? (n=130)

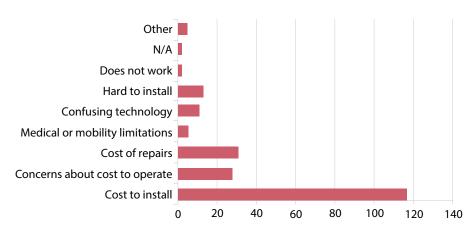


Figure 17. Energize! Survey results. Administered by King County and Spark Northwest in 2023 during three different workshops as a part of the Energize! heat pump pilot.

(Figure 17). Residents also reported landlord restrictions, complexity of the technology, and health or mobility limitations as hurdles to attaining home cooling. Obtaining fans, portable air conditioners, cold foods, and ice can also be a challenge when it is hot.

Residents face challenges with staying cool outside their homes.

Participants reported many obstacles to finding cooling options outside the home, including limited awareness of where to go and limited access to cooling centers and community cooling spaces. Additional barriers included transportation issues, safety concerns, known or perceived social stigmas, and a lack of age-appropriate on-site programming to help keep individuals or families engaged.

Participants also identified a need for more walkable green spaces and parks with more amenities. Neighborhoods, particularly in heat islands, tended to lack walkable shaded outdoor areas. Identified issues limiting the use of greenspaces and parks when it is hot include a lack bathrooms, shade structures, free water, enough seating, and accessible public transportation at local green spaces and parks. Some participants also mentioned an inability to swim or discomfort with water, which limited their ability to cool off via swimming.

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People experiencing homelessness face unique challenges.

Many focus group participants experienced physical and mental health issues that were exacerbated by heat, including heat stroke and a near fatality during the 2021 Heat Dome. Challenges for people experiencing homelessness included difficulties accessing public cooling spaces (limited hours, restrictions on restroom use, barriers to entry or staying in cool spaces), the cost of bottled water (combined with a lack of publicly accessible water sources), lack of heat impact awareness, social stigmas about people who are homeless, and challenges with pets. Residents living in tiny houses and cars had their living space heat up quickly, and affording food and hydration remained a challenge.

Seniors, multigenerational households, and rural areas also face challenges staying cool.

Seniors, especially those with low mobility, reported numerous challenges with heat. Residences with no air conditioning can become dangerously hot, and power outages can exacerbate these risks, especially for seniors in apartment buildings who cannot use stairs. Additionally, some seniors are not aware of the health risks they face. Language barriers can contribute to these and other heat-related challenges.

Larger multigenerational families sharing a single living space can struggle with staying cool at home. This can lead to heightened stress, discomfort, and health issues for all family members, particularly seniors and young children. Finally, the limited availability of cooling locations in rural communities can create added challenges for rural residents, particularly if they lack affordable transportation and/or must travel longer distances to find cooling.

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Residents employ a wide range of coping strategies when it is hot.

Residents employ a diverse range of coping strategies during extreme heat, ranging from makeshift methods like damp towels over windows to taking cold showers or soaking in ice to seeking airconditioned spaces. Families identified the importance of weather alerts to help them stock up on cold foods or cooling items (such as fans, portable air conditioning, or ice). If their living spaces were too hot, residents reporting seeking refuge in areas with air conditioning such as malls, homes of friends, or community centers. They also frequented shaded park spaces, pools, and lakes.

Residents reported the importance of relationships and community cohesion during heat waves. Multiple focus group participants reported checking in on or going to friends, elders in their community, and other families with young children. They also reported concern for vulnerable members of their community or people that work in hot environments, citing the need for community to take care of each other.

Residents are looking for equitable solutions for heat resilience.

Residents identified a variety of interventions to support heat resilience in their communities. Outreach participants advocated for support measures such as multilingual information and cooling resource distribution, information and resources for people facing occupational heat risk, inclusive and engaging community cooling spaces, support with cooling, sustainable urban design and policy, enhancing green spaces, and support for swim safety. Figure 19 at the end of this section illustrated some of those solutions.

Equity was a recurring focus in community discussions, highlighting the pressing need for fair access to cooling resources. Particularly among low-income and vulnerable groups, there was strong advocacy to create tailored solutions, such as proactive heatwave alerts, and culturally sensitive educational campaigns for the most vulnerable community members. Additionally, suggestions highlighted the need for consistent funding and partnership with government agencies and private organizations to boost capacity of community organizers to engage in resilience efforts and reach underserved populations. These insights underscore the importance of a collective effort to ensure that every community member, especially those most at risk, can effectively cope with extreme heat.



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Local governments are looking for strategic guidance and resources to support planning.

Local jurisdiction staff are looking for assistance in identifying strategic opportunities and resources for heat action. In particular, staff noted that local government heat work in King County would benefit from the following:

- a more comprehensive (but focused) approach
- consistency in approaches across jurisdictions,
- shared goals and collaborative approaches,
- flexibility in approaches so local jurisdictions can determine how and where to engage,
- equitable solutions,
- a heat toolkit/toolbox for accessing sample ordinances, policies, and best practices,
- shared communication resources and partnerships,
- information on funding and help with securing funding, and
- guidance and data, including support in identifying vulnerable communities.

Additional local government areas of interest for heat action are shown in Figure 18.

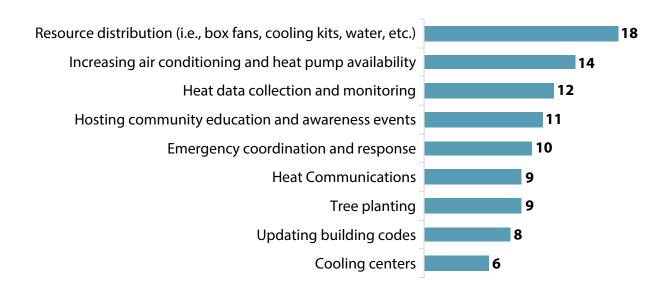


Figure 18. Survey responses to the question "Where would you like your jurisdiction to do more [on heat]? (pick top three)", Sound Cities Alliance participant survey, May 19, 2023.

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Figure 19: Adapting to Extreme Heat

- 1. Urban areas with little shade (upper left) lead to urban heat islands that put people at greater risk. Tree planting, green roofs and shade structures can reduce heat islands; while heat checks for vulnerable populations, public and commercial spaces with AC coupled with transportation to these venues (upper right) can reduce extreme heat health risks.
- 2. Vulnerable individuals such as older people with pre-existing medical conditions and/or limited mobility (middle left) are at higher risk during extreme heat events. Reducing direct sunlight with blinds and trees in south-facing windows, installing and using AC and conducting wellness checks (middle right) can help reduce that risk.
- 3. Outdoor workers (lower left) are especially vulnerable during peak temperatures. Encouraging rehydration with scheduled breaks and quickly accessible bathrooms, shifting working hours and increasing shade with temporary shade structures (lower right) are proven strategies to reduce extreme heat health risks for outdoor workers.

Figure credit: Zoe Vartanian (UW College of the Environment), Zach Kearl (UW Climate Impacts Group) and "In the Hot Seat" report author team.²

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ACTIONS

Heat strategy actions are organized into six categories and include the following information:

Action Description:

Summarizes what the action seeks to accomplish, the issue(s) being addressed, the spectrum of work involved, and intended outcome(s). Many actions include multiple activities. These activities further delineate aspects of the work needed to achieve action outcomes. The activities also provide options for engaging in the work, allowing implementation partners the opportunity to scale their work relative to differing organizational needs, capacities, and resources.

Implementation Partners:

Identifies organizations, groups, or communities that serve a key role in guiding, implementing, and sustaining the work, depending on how the action is implemented. Listed partners include confirmed and potential partners. Implementation partners may also include other organizations not included in the list.

Action Typology:

Identifies actions as one of three action types. Actions can have more than one typology based on different activities within the action.



"Accelerate": identifies actions where the intent is to accelerate existing at-scale efforts so community benefits are realized sooner. "At-scale" is defined as county-wide in its implementation or happening in enough locations to be considered county-wide in practice. Examples include public health messaging on heat and operation of public cooling centers.



"Scale up": identifies actions where the intent is to expand the scope and scale of smaller scale efforts to cover more places and communities. Examples include expanding pilot projects or best practices.



"New": identifies a new activity or emerging practice for our region.

Implementation Feasibility: 🌞 — 🔅 🔅

Identifies the relative level of effort required to implement the action. Options are easy, moderate, or hard. Factors that influence implementation feasibility include funding and staffing requirements; legal, technical, or logistical challenges; and the degree to which organizations are already engaged in the work or similar activities. Actions that contain multiple activities may have a range of feasibility, e.g., easy to moderate or easy to hard.

Alignment with Community Feedback:



Identifies actions that are directly responsive to priorities identified by community members during engagement efforts.

Timeline for Community Benefits:

Identifies the general time frame in which communities would see benefits once the action is implemented. Options are under one year, one to three years, and over three years. Actions that contain multiple activities may have multiple time frames. Summary benefits are noted. Additional benefits may exist.

Callout Box:

Highlights an example of ongoing work related to the action or a key idea related to action implementation.

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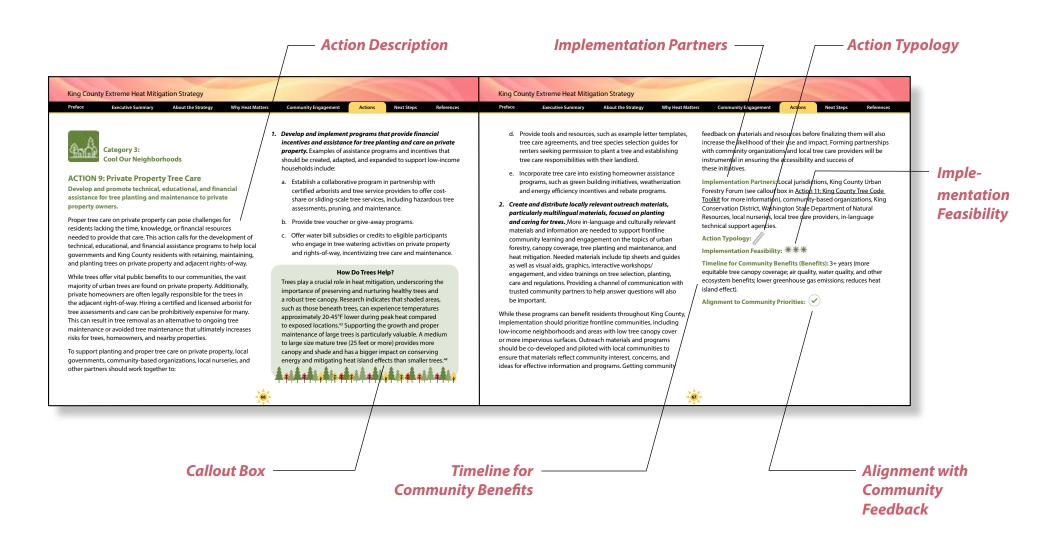
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HEAT STRATEGY ACTIONS

Category 1: Help People Stay Cool and Safe Indoors

- 1. In-home heat safety
- 2. Energy efficiency and utility bill assistance
- 3. Heat pump installations
- 4. Enhanced cooling centers
- 5. Community-led cooling spaces

Category 6: Support Heat Action

- 19. Sustainable partnerships for implementation
- 20. Support community solutions

Category 5:

Increase Heat Safety Awareness

- 17. Multilingual communications
- 18. Community heat preparedness trainings



Heat strategy actions are organized into six categories



Category 2: Help People Stay Cool and Safe Outdoors

- 6. Drowning prevention
- 7. Cool kits for unhoused people
- 8. Occupational heat safety



- 9. Private property tree care
- 10. Maximize tree survival
- 11. King County tree code toolkit
- 12. Track equitable canopy cover
- 13. Open space access



- 14. Cool schools
- 15. Building and development codes
- 16. Heat smart parks and playgrounds





ACTION 1: In-Home Heat Safety

Increase access to portable air conditioning and in-home heat safety support for low-income seniors, people with disabilities, and homebound individuals.

Community outreach shows a strong interest in home cooling and other approaches to staying safe at home when it is hot. This action, in concert with expanding access to heat pumps (Action 3: Heat Pump Installations), leverages local and regional partnerships to support access to in-home cooling options and provide additional in-home heat safety support for low-income seniors, people with disabilities, and homebound individuals.

Indoor heat safety is particularly important for low-income seniors, people with disabilities, homebound individuals, and others who may have difficulty seeking access to cooling outside of their residences due to limited mobility, limited income, pre-existing health conditions, and social isolation, among other factors. Fifty-five percent (304 of 557) of emergency department visits¹⁷ and 32 of 34 heat-related deaths in King County during the June 2021 Heat Dome involved residents aged 60 and older.³⁵

This action calls for the following in-home heat safety supports for at-risk community members:

- 1. Increase access to portable air conditioners and other lower-cost options for cooling. For many households, portable air conditioners such as a window unit or free-standing mobile air conditioner are the most affordable or only option for air conditioning. Increasing access to portable air conditioning for low-income residents who face higher heat-related health risks includes working with service providers and community-based organizations to:
 - a. Fund direct distribution, partner with local businesses on a voucher program for discounted units, and/or support partner procurement and distribution to at-risk communities.
 - Distribute or otherwise help senior housing, low-income housing, and caregiving facilities purchase portable air conditioners for at-risk residents and/or to create shared "cool rooms" for residents.
 - c. Work with the Washington State Department of Health and other state and local partners to find additional pathways for procuring affordable in-home cooling resources to those who need it most (see box).
- 2. Support passive cooling approaches such as interior or external shades and ultraviolet reflective window films to help reduce interior heating. These approaches can be used alone or in combination with portable air conditioning to help increase the efficacy of air conditioning and should be coupled with additional heat-safety support and information on utility assistance (see Action 2: Energy Efficiency and Utility Bill Assistance).

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Expanding Access to Air Conditioning

In 2022, Oregon passed groundbreaking legislation (Senate Bill 1536) requiring the Oregon Health Authority to create a program for distributing portable air filters and air conditioning (AC) units to residents who qualify for medical assistance through the Oregon Health Authority, the Department of Human Services, or Medicare. This program was set to distribute approximately 3,000 AC units and 4,700 air filtration devices in 2023. Authorized air conditioning units include freestanding or window units with an energy efficiency ratio rating of eight or higher. Additionally, installation of the units cannot require alteration of the dwelling unit. Senate Bill 1536 also revised state law to limit a landlord's ability to prohibit or restrict tenants from installing air cooling devices in their residences, provided operation of the units does not pose safety hazards. For more information on Oregon Health Authority's program, Air Conditioner and Air Filter Deployment Program.

- 3. Expand in-home heat safety support for low-income seniors, people with disabilities, and homebound individuals. In addition to helping at-risk individuals access residential cooling as described above, in-home heat safety can be supported via work with service providers and community-based organizations to:
 - a. Distribute "Cool Kits" like those described in Action 7: Cool Kits for Unhoused People to at-risk individuals.
 - b. Share information on heat safety, summer preparedness, and utility bill assistance programs with at-risk individuals and their caregivers through partner programming and outreach, including home visits.
 - c. Promote wellness checks during heat events inclusive of multilingual guidance on when and how to check on at-risk individuals, and how to help when help is needed.

Implementation of this action should prioritize low-income individuals in identified heat islands.

Implementation Partners: Public Health-Seattle & King County, King County Housing Authority, King County Dept. of Community and Health Services, local governments, local public housing authorities, Seattle Public Library, neighborhood associations, community-based organizations and non-profits who work with vulnerable communities such as Sound Generations, King County Senior Hubs, social workfocused organizations.

Action Typology: 🎉 🔎



Implementation Feasibility: *-**

Timeline for Community Benefits (Benefits): 0 – 3 years (direct support for higherrisk communities; increased public awareness; building local capacity)

Alignment to Community Priorities: (



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Help People Stay Cool and Safe Indoors

ACTION 2: Energy Efficiency and Utility Bill Assistance

Expand access to weatherization, energy efficiency, and utility bill payment assistance.

Housing quality and utility costs can be important factors in how heat affects residents, particularly in heat islands. This action seeks to directly address concerns expressed in focus groups and community surveys about utility costs as a barrier to cooling in the summer by increasing awareness of and participation in weatherization, energy efficiency, and utility bill payment assistance programs, particularly by low-income residents living in identified heat islands.

Older, less energy efficient housing can lead to higher indoor air temperatures, putting resident health at risk from heat-related health issues. Higher temperatures can also reduce the effectiveness of air conditioning (when available), requiring more energy to cool interior spaces resulting in higher utility bills and increased utility burden for low-income residents. In 2018, King County found that 124,000 low- and moderate-income households spent more than 30 percent of their income on housing and utility costs. Communities of color and renters are more likely to spend upwards of 50 percent of their income towards these costs.³⁶

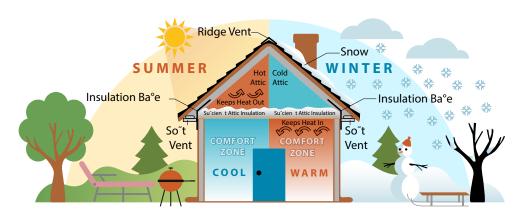


Figure 20: Benefits of proper weatherization include less cost to maintain comfortable temperatures inside the home. *Figure based on ENERGY STAR graphic*.

Energy efficient repairs and upgrades such as sealing air leaks around windows, adding insulation to attics and basements, and replacing inefficient cooling equipment with electric heat pumps (see also Action 3: Heat Pump Installations) can help lower indoor temperatures and utility costs during heat events by increasing the efficacy of air conditioners and passive cooling approaches such as light-colored roofs or window treatments. Having air conditioning and sealing air leaks around windows and doors also reduces infiltration of wildfire smoke into homes, providing additional health benefits for residents.

Accessing weatherization, energy efficiency, and utility bill payment assistance can be a challenge for many income-eligible households. Renter participation in these programs can also be challenging if renters do not have a direct billing relationship with their utility or are not authorized to make weatherization and energy efficiency improvements to their rental unit.

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Despite qualifying for bill discounts, utilities and local distributors of the federal Low Income Home Energy Assistance Program (LIHEAP) report resident under-utilization of homeowner energy assistance programs. Renter participation in these programs can also be challenging. Renters may have more difficulty accessing utility assistance programs if they do not have a direct billing relationship with their utility and/or may not be authorized to make weatherization and energy efficiency improvements to their rental unit. Alternately, landlords may not have strong incentives to invest in weatherization and energy efficiency upgrades if tenants are responsible for paying for energy costs.

To address these concerns, this action calls for increased partnership between King County, local jurisdictions, energy utilities, community-based organizations, service providers, public housing authorities, and other organizations to:

1. Expand outreach in eligible communities to help inform and connect qualifying residents to weatherization, energy efficiency, and utility bill payment assistance programs.

Expanded outreach should be paired with Action 17: Multilingual Communications to help ensure information is provided in languages and formats that reach diverse audiences. Additionally, information about time-sensitive programs should be conveyed ahead of time to ensure community members can respond within the necessary eligibility window. Expanded outreach also provides an opportunity to include additional tips and resources for staying cool during extreme heat events.

- 2. Partner with community-based organizations to increase access to relevant programs. This could include expanding outreach partnerships to provide administrative support for enrolling community members in utility assistance programs and related rebate or incentive programs.
- 3. Work with utilities, service providers, and public agencies to streamline and expand enrollment in energy efficiency and assistance programs. This could include linking energy assistance program enrollment with other benefit programs and encouraging self-attestation of eligibility. Doing so can facilitate auto enrollment and limit required documentation. Work on this action includes addressing data sharing and other barriers that can limit these linkages.
- 4. Identify technical, programmatic, and policy solutions to improve the energy efficiency of rental housing for costburdened renter households. Examples could include rental housing retrofit grant programs with affordability covenants, rental housing energy disclosure requirements, and rental housing efficiency requirements.

Additionally, this action calls on utilities and other partners to prioritize implementation of the above actions in heat islands and to integrate heat mapping results into program eligibility, evaluation, and prioritization criteria, as appropriate, for utility assistance programs and initiatives related to weatherization and energy efficiency upgrades.



Implementation Partners: King County, Seattle City Light, Puget Sound Energy, local jurisdictions, funders such as the Washington State Department of Commerce and Environmental Protection Agency, community-based organizations and non-profits who work with vulnerable communities, home weatherization/energy efficiency contractors, and public housing authorities.

Action Typology:

Implementation Feasibility: ** -- * * *

Timeline for Community Benefits: 0 – 3 years (direct support for higher-risk communities; building local capacity; lower greenhouse gas emissions)

Alignment to Community Priorities:



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ACTION 3: Heat Pump Installations

Expand heat pump installation programs to cover more households and locations.

Cooler indoor temperatures can save lives during a heatwave. This action seeks to leverage local and regional partnerships to expand access to energy efficient electric heating and cooling systems known as heat pumps, with an emphasis on increasing access for low- and moderate-income family homes, multifamily buildings, locations that serve heat-sensitive populations (e.g., daycares, senior care facilities), and facilities that could serve as community-trusted cooling locations during heat wave events (see Action 5: Community-led Cooling Spaces).

Maintaining cooler indoor ambient temperatures is critical to keeping people safe during heat waves. Though most attention is focused on outdoor temperatures during extreme heat events, high indoor temperatures can also be dangerous, particularly for low-income residents and those who may need to stay home during heat events or who have difficulty traveling to public cooling centers. This includes residents with limited mobility, health conditions, caregiving needs, transportation challenges, or safety concerns.

While air conditioning use is on the rise in the King County region,³⁷ data show notable inequities in who has access to residential cooling. As of 2023, 64 percent of households with air conditioning in the

Heat Pump Installation Campaigns

Multiple model programs and initiatives in the Puget Sound have installed heat pumps in low- to moderate-income homes. As of December 2023, the Energy Smart Eastside Program has provided 25 affordable housing units with weatherization and heat pumps, done 116 site assessments, and installed 17 heat pumps. Seattle's Clean Heat program has transitioned approximately 5,000-7,000 households off of oil heat to heat pumps since 2017. King County's Energize! Program is working towards installing 150 heat pumps in Skyway and White Center homes while leveraging weatherization and utility discounts as well.

In 2024, King County was awarded \$1.5 million in Climate Commitment Act funds from the Washington State Department of Commerce to install heat pumps in Adult Family Homes (AFHs) in King County, or residential homes licensed to care for up to six adults in need of care, such as seniors, people with mental health issues, developmental disabilities, or dementia. King County anticipates that the grant will fund heat pump installations in 50 to 60 AFHs, helping up to 360 persons. There are 1,527 licensed AFHs within King County and its cities, representing approximately 33% of the 4,661 AFHs in the state. Approximately 65% of AFHs are funded by Medicaid supporting low-income seniors. This AFH heat pump program will help address community needs by supporting primarily low-income seniors and lower-wage workers or AFH operators with cooling services and improved indoor air-quality, while also reducing fossil fuel consumption and greenhouse gas emissions from improvements to targeted AFH facilities.

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Seattle metro area had household incomes of \$200,000 or more.³⁸ In comparison, only 41 percent of households with incomes below \$50,000 had air conditioning.

Several King County jurisdictions have piloted efforts to incentivize or retrofit homes with heat pumps. Heat pumps can reduce energy bills for oil-heated homes and support widespread energy bill savings when integrated with weatherization and utility discount programs. Electric heat pumps also reduce greenhouse gas emissions, particularly when replacing oil heat, and can help reduce exposure to wildfire smoke due to the ability to keep windows closed even when it is hot.

To increase heat pump access for residents, this action calls for local partnerships to implement any combination of the following approaches:

- a. Expand individual installation programs to cover additional households or wider geographic areas with full-cost installations for low-income homes and reduced-cost installations for moderate-income homes. Engage multifamily landlords to increase enrollment of their properties in heat pump programs while ensuring rent protections for tenants.
- b. Pursue distributor rebate programs, point-of-sale rebates for homeowners for equipment meeting specific requirements, and reduced installation costs.
- c. Develop a larger King County-wide heat pump program that

allows cities to pool funding with King County to support installations. This would need additional staff support or sufficient funding to contract with a consultant or nonprofit provider.

Work should be coordinated with weatherization and utility discount programs to sustain cooling benefits and to support cost-reductions for low-income residents (see Action 2: Energy Efficiency and Utility Bill Assistance). Several jurisdictions are also working with the Building Decarbonization Coalition to pilot the Switch is On Washington campaign providing guidance to homeowners and renters on rebates, contractors, and educational resources on multiple types of home electrification efforts – including heat pumps. Finally, this action can also support local job creation, local contractor development, and women and minority-owned businesses enterprise recruitment.

Action Typology:

Implementation Partners: King County, local jurisdictions, community-based organizations and non-profits who work with vulnerable communities, service providers, housing authorities, utilities, heat pump distributors and installers.

Implementation Feasibility: 🔅 🔅 🔅

Timeline for Community Benefits (Benefits): 1 – 3 years (direct support for higher-risk communities; workforce development; lower greenhouse gas emissions)

Alignment to Community Priorities:



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ACTION 4: Enhanced Cooling Centers Provide wrap-around services at public cooling centers.

In community engagement events and surveys conducted by King County's Office of Emergency Management, King County residents indicated a need for more awareness of, access to, and programming at existing public cooling centers. This action looks to support those needs and increase utilization of public cooling centers with additional investment in cooling center staffing, amenities, and accessibility.

Cooling options outside the home are necessary interventions to keep King County residents safe and cool. In response to extreme heat events, local governments in King County have opened cooling locations that offer air conditioning to all members of the public. However, public cooling centers often report low utilization rates. Community engagement points to a lack of cooling center awareness, family friendly programming, and accessible transportation as barriers to accessing cooling options outside the home.

This action calls on King County agencies and local governments to support increased community access to and use of public cooling centers by:

- a. Collaborate to identify and address gaps in cooling centers services and transportation access.
- b. Promote and advertise transit options to and from extreme

- c. Provide additional incentives such as snacks, bottled water, Wi-Fi access, and the ability to charge devices at cooling centers.
- d. Increase communications related to cooling center options during heat events, including information on disability accessibility. Coordinate this work with Action 17: Multilingual Communications to ensure messaging around cooling centers is provided in multiple languages prior to, during, and following any extreme weather event.
- e. Budget additional funding for staff and operation costs to accommodate longer access to cooling centers.

These steps will increase access to lifesaving and sustaining services, especially for individuals living in neighborhoods with elevated temperature in the day and night. Implementation of this action will be prioritized in lower income neighborhoods that are identified heat islands based on temperature mapping (see Section 2: Heat, Equity, and the Built Environment).

Implementation Partners: King County Office of Emergency Management, local jurisdictions, King County Metro, Public Health-Seattle & King County.

Action Typology:



Implementation Feasibility: * * *



Alignment to Community Priorities:



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ACTION 5: Community-led Cooling Spaces Expand cooling location options to include more community-trusted locations.

This action seeks to expand partnerships between County and local governments, service providers, community-based organizations, faith-based organizations, and others to create additional cooling locations for frontline communities at community-trusted locations. These locations may include cultural centers, places of worship, senior centers, community kitchens, and community-based organization facilities.

Community-trusted facilities are uniquely positioned to serve as cooling locations that are culturally compatible and attuned to the needs of their high-risk community members. In focus groups conducted with elder adults in Seattle's Chinatown-International District and in Kent—both prominent heat islands—participants indicated a strong preference for cooling centers located in and operated bytrusted community organizations due in part to concerns about societal stigmas and safety at public cooling centers. The King County Regional Operational Plan for Extreme Weather Centers and Disaster Sheltering also identifies this need as a key priority in preparing for and responding to extreme weather events.

While community members express interest in community-trusted cooling locations, the ability for community-based organizations to

serve in this capacity varies. Community-based organizations have a range of available resources and staff capacity and may require customized support to serve as a cooling location for their vulnerable community members. Needs identified by the Community Partners Workgroup included heat safety training, funding for extended staff hours and coordination, and infrastructure upgrades to provide or improve cooling capacity. Workgroup members additionally noted the need to provide resource programming and refreshments at community-led cooling spaces.

This action calls on action partners to support the development of more community-trusted cooling locations via the following activities:

- 1. Work with frontline community partners to identify potential locations and site hosts. As part of this process, survey community organizations and facilities to identify cooling, training, and resource needs for designating a location as a community-trusted location.
- **2.** Equip community facilities with the necessary resources and upgrades to serve as a cooling location. This may occur via direct funding for specific site needs, partnering with potential host sites on grants, and/or pursuing public/private partnerships to help resource site needs, such as heat pump installation (Action 3: Heat Pump Installations), weatherization, renewable energy systems (such as solar), back up battery energy storage, external and internal shade structures, outdoor shading via canopies, or supplying organizations with portable air conditioners.

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- **3.** Train community-based organization staff to organize and operate cooling locations. King County will work with local government and community partners to develop and distribute training materials such as multilingual training guides and workshops to support community-based organization staff in planning for and operating cooling spaces. This could be offered in combination with other community-based organization heat preparedness and safety trainings as described in Action 18: Heat Resilience Trainings.
- **4. Support the creation of Resilience Hubs.** At the more complex and more resource-intensive end of the spectrum, some community facilities may be able to serve as Resilience Hubs, providing community support services for a broader range of extreme events, in addition to heat (see box). Eight Puget Sound Region counties and their respective Tribal Nations are initiating the planning, engagement, and contracting process for developing community-specific Resilience Hubs, with its first strategy to plan for catastrophic events. Critical hazards include a Cascadia Subduction Zone event, extreme heat, and wildfire smoke. As cities are in different places in the planning process, King County could share community-informed planning efforts among municipalities interested in developing Resilience Hubs and support the development of a regional Resilience Hub strategy. Up-to-date information on this work can be found at this link (https://maps.seattle.gov/resilience-hubs).

Implementation Partners: King County, local jurisdictions, community-based organizations that are interested in serving as cooling locations.

Action Typology:



Implementation Feasibility:

Timeline for Community Benefits (Benefits): 1-3 years (direct support for higher-risk communities; building local capacity)

Alignment to Community Priorities: (





Figure 21. Community trusted locations can serve an important role in heat awareness and safety in King County.

Photo source: King County

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What is a Resilience Hub?

Resilience Hubs are an emerging practice for supporting local resilience and capacity to respond and recover from hazards, including the impacts of extreme weather.38 Resilience Hubs are community-trusted locations that can quickly transition from regular community services and programming to emergency support for local communities. Hubs are tailored to meet the unique needs of their community and come in various forms, ranging from community-led facilities to senior centers, libraries, and faith-based institutions. Collaborative partners for Hubs include government agencies, non-profit organizations, and community stakeholders.

In the context of heat, Resilience Hubs can serve as cooling centers, offering respite to individuals lacking access to air conditioning or suitable shelter. Moreover, Resilience Hubs can serve as locations for distributing heat safety information, resources such as water and cooling supplies, and coordinating community-based heat emergency response efforts.³⁹

Interest in resilience hubs is growing in the Puget Sound region. The City of Seattle's Office of Emergency Management is working with frontline communities and local governments in Island, King, Kitsap, Mason, Pierce, Skagit, Snohomish, and Thurston counties and Federally Recognized Tribal Nations to identify needs and opportunities for Resilience Hubs in these locations. The City of Issaquah is also creating a network of Resilience Hubs, starting with the city's local senior center.

For more information on Resilience Hubs, see the Urban Sustainability Directors Network's Resilience Hubs resource site https://resilience-hub.org/resources/.



Figure 22. Community Emergency Response Team volunteers preparing for an emergency exercise at the Issaquah Senior Center Resilience Hub. *Photo source: City of Issaquah.*



ACTION 6: Drowning Prevention

Promote water safety and drowning prevention through swimming lessons, lifeguard training, and distribution of water safety equipment.

Swimming outdoors and water recreation in lakes, rivers, and Puget Sound are a popular and cost-effective ways to cool off when it is hot in King County. However, keeping people safe while enjoying the water is an ongoing challenge. This action seeks to build on and expand partnerships to increase access to water safety resources and to promote awareness and education of drowning risk especially during summer months.

King County has reported an elevated number of drownings since 2019.³⁹ Multiple factors influence drowning risk, including access to water safety resources, lifeguard availability, cultural barriers, financial barriers, and lack of transportation. Black residents—who have less access to pools and swimming lessons—are two-and-a-half times more likely to drown than white residents.⁴⁰ Recent immigrants and people who are unfamiliar with the region's colder, swifter waters are also at greater risk due to language and cultural barriers.⁴⁰

Local efforts to address swim equity have grown in recent years, although more support is needed. Programs such as Swim Seattle and No More Under have worked to increase access to swim lessons

and personal flotation devices. Demand for these services exceeds available resources, however. Local governments are also working to address an ongoing shortage of local lifeguards and promote educational campaigns and on-site signage focused on reducing the risk of drowning.

Saving Lives through Swim Lessons

Swim lessons and water safety skills are one layer of protection against unintentional childhood drowning deaths. This need is particularly acute for children and communities of color, who are at a disproportionate risk of drowning.

Programs such as <u>Swim Seattle</u> (led by Seattle Parks & Recreation and the YMCA of Greater Seattle) and <u>No More Under</u> are providing equitable access to swim lessons within Seattle. Swim Seattle is an initiative that aims to address the higher youth drowning rates in communities of color, and they started providing free swim lessons and watersafety workshops to youth starting in 2023. The program also prioritizes families who cannot afford lessons. No More Under offers a similar service - facilitating connections between existing organizations that provide learn-to-swim programs to youth and families who are looking to learn to swim. These programs ensure that every child can safely enjoy the plentiful amount of swimming areas around our region.

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This action calls on King County, local governments, service organizations, and community-based organizations to work together to:

- 1. Increase access to swim lessons for income eligible children and adults. This includes increasing direct funding support for swim equity programs, partnering on grants, or providing other forms of support that allow swim programs to serve more low-income families. This also includes working with community-based organizations to raise awareness about swim equity opportunities.
- 2. Expand access to water safety equipment such as personal flotation devices. This includes expanding funding support and distribution channels for distribution of personal flotation items such as life vests and to increase lifejacket loaner programs throughout the region.
- 3. Improve availability and enrollment in lifeguard trainings. This includes expanded options for lifeguard training, expanded outreach via community-based organizations to low-income and other at-risk communities to increase participation in lifequard certification courses, and reducing financial barriers for participation in those trainings. Work can build upon existing efforts and partnerships underway in King County.
- 4. Develop and distribute water safety messaging and increase on-site signage for drowning risk awareness. This includes additional messaging around drowning prevention and safety resources (such as life vests) during public health summer

safety messaging campaigns (see Action 17: Multilingual Communications), direct distribution of translated water safety materials to community-based organizations and Community Navigators, and partnership with local jurisdiction Parks departments to increase water safety signage in outdoor swimming locations.

Implementation Partners: King County Play Equity Cohort, YMCA, King County (Public Health—Seattle & King County, Department of Natural Resources & Parks), local jurisdiction Parks departments, community-based organizations and non-profits who work with vulnerable communities.

Action Typology:



Implementation Feasibility: **

Timeline for Community Benefits (Benefits): 0 – 1 years (direct support for higher-risk communities; increased public awareness; expanded recreation opportunities).

Alignment to Community Priorities:





Photo source: City of Seattle Parks and Recreation

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ACTION 7: Cool Kits for Unhoused People Distribute Cool Kits for unhoused people during heat events.

Unhoused people often bear the worst of extreme heat due to a lack of access to hydration, shade, and indoor facilities with cooling. This action seeks to reduce heat-related illness and the adverse impacts of extreme heat through the direct distribution of personal cooling items delivered as close as possible to where the residents are located.

During the 2021 Heat Dome and 2022 heat events, the King County Regional Homelessness Authority (KCRHA) worked with service providers to distribute cooling resources directly to unhoused residents in King County. Setting up cooling tents and directly providing cooling resources such as cold water, cooling towels, UV protective clothing, sunscreen, and other personal cooling items to vulnerable individuals in the form of "Cool Kits" helped bring heat relief to unhoused residents wherever they were sheltering. Ongoing purchase and distribution of Cool Kits is uncertain, however, as pandemic response-related funding sources used to cover costs in 2021 and 2022 wind down.

This action calls for increased and sustained funding and programmatic support for the purchase and distribution of Cool Kits

for unhoused populations living in King County. With direct funding and in-kind support from local governments (such as assistance with item storage or procurement), the private sector, and philanthropic organizations, KCRHA can order and distribute cooling items to utilize its existing network of service providers to assemble Cool Kits customized for the specific needs of local unhoused communities. Cool Kit distribution could also occur at pop-up locations selected by service providers.

This work will promote heat safety and reduce the potential for heat-related illness in communities that are the most prone to adverse health impacts. Additionally, distribution of Cool Kits can strengthen coordination between local jurisdictions, KCRHA, and service providers when planning to support King County's most vulnerable residents.

Implementation Partners: King County Regional Homelessness Authority (lead), local jurisdictions, service providers (especially extreme weather service providers such as the Salvation Army and Urban League), Public Health-Seattle & King County, philanthropic organizations.

Action Typology:

Implementation Feasibility: 🔅 🔅

Timeline for Community Benefits (Benefits): 0 - 1 years (direct support for higher-risk communities).

Alignment to Community Priorities:



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ACTION 8: Occupational Heat Safety

Increase heat safety awareness and preparedness for workers who are more at-risk when it is hot.

People who work outside or in certain indoor environments are at higher risk for heat-related illness.⁴¹ Occupations that may face a higher risk of heat illness include agricultural, construction, and delivery workers; gardeners; day laborers; and individuals working in warehouses, factories, and commercial kitchens. This action seeks to directly address concerns expressed in focus groups and community surveys about at-risk workers through increased distribution of heat safety awareness, trainings, and resources.

Multiple occupational factors can increase heat risk, including prolonged exposure to high outdoor temperatures, increased body heat due to physical exertion,⁴² and in some cases, the use of personal protective equipment.⁴³ Additional risk factors include immigration status, language barriers, inequities in access to healthcare, economic status, and a fear of backlash when requesting accommodations when it is hot.^{41,44,45}

As awareness about heat impacts on health has grown, additional standards and best practices have been established nationally and regionally to support worker safety (see box).⁴⁶ While these standards and best practices are in place, a lack of awareness and

Washington Labor & Industries Outdoor Heat Exposure Rules

The Washington State Department of Labor & Industries adopted updates to Outdoor Heat Exposure rules on June 27, 2023. The updated rules provide minimum requirements for employers to prevent heat-related illness and traumatic injuries for outdoor workers exposed to heat. This includes requirements for providing shade, rest, water, and acclimation for outdoor workers.

The rules also updated temperature thresholds for which some preventative actions must be taken, such as reducing the Outdoor Temperature Action Level from 89°F to 80°F. The rules furthermore require employers to help workers prepare for hot temperatures and exposure to heat by addressing outdoor heat exposure safety in their accident prevention programs, providing annual heat-related illness training, having emergency procedures to respond to heat-related illness symptoms, and ensuring an accessible route of communication between supervisors and employees in the case of an emergency.

These updates help workers and employers be heat smart and reduce the risk that outdoor workers can face for heatrelated illness, heat exhaustion, heat stroke, and acute kidney damage.

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understanding of these measures can make it more challenging for workers to proactively protect their health when it is hot. Additionally, some workers—particularly day laborers, agricultural workers, and/or those who may face language, income, or other barriers to adjusting work activities when it is hot—remain especially vulnerable to heat.

This action calls for increased partnership between state and local agencies, community-based organizations, service providers, and others to:

- 1. Increase awareness of heat and occupational safety best practices. Consistent with Action 17: Multilingual Communications, King County will work with partners to adapt existing heat safety recommendations from the National Institute for Occupational Safety and Heat (NIOSH), Washington Labor & Industries (L&I), and other sources into multilingual, visually relatable mediums for distribution by service organizations and community-based organizations. Messaging should focus on health concerns from prolonged exposure to extreme heat in the workplace and what individual actions can reduce heat stress. To ensure this messaging contains up-to-date information on heat impacts and available safety resources and standards, collaboration with health and labor agencies should be prioritized.
- 2. Distribute cooling resources and heat safety trainings to outdoor workers. Similar to Action 7: Cool Kits for Unhoused People, King County, local jurisdictions, and private sector organizations should partner with service providers and

community-based organizations that serve residents working in higher heat risk environments to distribute items that aid in personal cooling, along with heat safety messaging. This could include items such as reusable water bottles, electrolytes, hats, cooling cloths, and other resources. Messaging developed by Public Health-Seattle & King County regarding wildfire smoke safety can also be incorporated into the above actions, resulting in more comprehensive awareness for summer climate hazards.

Implementation Partners: Public Health-Seattle & King County; Washington Department of Labor & Industries; Washington Department of Health; local jurisdictions; community-based organizations and non-profits that work with outdoor workers local jurisdictions, including such as Casa Latina; private sector; philanthropic organizations.

Action Typology:



Implementation Feasibility: 🐞

Timeline for Community Benefits (Benefits): 0 - 3 years (direct support for higher-risk communities; increased public awareness).

Alignment to Community Priorities: (





Category 3: Cool Our Neighborhoods

ACTION 9: Private Property Tree Care

Develop and promote technical, educational, and financial assistance for tree planting and maintenance to private property owners.

Proper tree care on private property can pose challenges for residents lacking the time, knowledge, or financial resources needed to provide that care. This action calls for the development of technical, educational, and financial assistance programs to help local governments and King County residents with retaining, maintaining, and planting trees on private property and adjacent rights-of-way.

While trees offer vital public benefits to our communities, the vast majority of urban trees are found on private property. Additionally, private homeowners are often legally responsible for the trees in the adjacent right-of-way. Hiring a certified and licensed arborist for tree assessments and care can be prohibitively expensive for many. This can result in tree removal as an alternative to ongoing tree maintenance or avoided tree maintenance that ultimately increases risks for trees, homeowners, and nearby properties.

To support planting and proper tree care on private property, local governments, community-based organizations, local nurseries, and other partners should work together to:

- 1. Develop and implement programs that provide financial incentives and assistance for tree planting and care on private property. Examples of assistance programs and incentives that should be created, adapted, and expanded to support low-income households include:
 - a. Establish a collaborative program in partnership with certified arborists and tree service providers to offer cost-share or sliding-scale tree services, including hazardous tree assessments, pruning, and maintenance.
 - b. Provide tree voucher or give-away programs.
 - c. Offer water bill subsidies or credits to eligible participants who engage in tree watering activities on private property and rights-of-way, incentivizing tree care and maintenance.

How Do Trees Help?

Trees play a crucial role in heat mitigation, underscoring the importance of preserving and nurturing healthy trees and a robust tree canopy. Research indicates that shaded areas, such as those beneath trees, can experience temperatures approximately 20-45°F lower during peak heat compared to exposed locations.⁴³ Supporting the growth and proper maintenance of large trees is particularly valuable. A medium to large size mature tree (25 feet or more) provides more canopy and shade and has a bigger impact on conserving energy and mitigating heat island effects than smaller trees.⁴⁴

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- d. Provide tools and resources, such as example letter templates, tree care agreements, and tree species selection guides for renters seeking permission to plant a tree and establishing tree care responsibilities with their landlord.
- e. Incorporate tree care into existing homeowner assistance programs, such as green building initiatives, weatherization and energy efficiency incentives and rebate programs.
- 2. Create and distribute locally relevant outreach materials, particularly multilingual materials, focused on planting and caring for trees. More in-language and culturally relevant materials and information are needed to support frontline community learning and engagement on the topics of urban forestry, canopy coverage, tree planting and maintenance, and heat mitigation. Needed materials include tip sheets and guides as well as visual aids, graphics, interactive workshops/ engagement, and video trainings on tree selection, planting, care and regulations. Providing a channel of communication with trusted community partners to help answer questions will also be important.

While these programs can benefit residents throughout King County, implementation should prioritize frontline communities, including low-income neighborhoods and areas with low tree canopy cover or more impervious surfaces. Outreach materials and programs should be co-developed and piloted with local communities to ensure that materials reflect community interest, concerns, and ideas for effective information and programs. Getting community

feedback on materials and resources before finalizing them will also increase the likelihood of their use and impact. Forming partnerships with community organizations and local tree care providers will be instrumental in ensuring the accessibility and success of these initiatives.

Implementation Partners: Local jurisdictions, King County Urban Forestry Forum (see callout box in <u>Action 11: King County Tree Code Toolkit</u> for more information), community-based organizations, King Conservation District, Washington State Department of Natural Resources, local nurseries, local tree care providers, in-language technical support agencies.

Action Typology:



Timeline for Community Benefits (Benefits): 3+ years (more equitable tree canopy coverage; air quality, water quality, and other ecosystem benefits; lower greenhouse gas emissions; reduces heat island effect).

Alignment to Community Priorities:



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ACTION 10: Maximize Tree Survival

Research, share, and promote best practices tree establishment to increase survival of newly planted trees.

While many communities have had success in creating tree planting programs, ensuring that trees survive past the planting period remains a significant challenge, particularly in urban environments. This action calls for jurisdictions to prioritize increasing survival of newly planted trees, especially along streets, in urbanized landscapes, in parks, and in new developments in low canopy neighborhoods.

Newly planted trees generally require a two to three-year-establishment period for the tree to generate a healthy root system and adjust to the planting location. Poor site conditions, environmental stress, improper planting techniques, and inadequate watering and care during this critical period contribute to low survival rates. Additionally, a lack of local funding and resources to implement and reinforce proper planting preparation, installation and after care during the establishment period compounds this challenge.

To support the survival of newly planted trees, local jurisdictions and other implementation partners will need to collaborate on the following activities:

- a. Establish and update tree planting guidelines to meet industry standards and best practices.
- b. Build capacity to assign a staff point of contact to ensure oversite, guidance, and follow-through of tree planting projects and requirements where applicable.
- c. Test and share innovative planting and watering techniques, such as tree hydration products and systems and structural soils or soil cells, to overcome space limitations and accommodate tree growth.
- d. Collaborate with regulatory agencies to streamline permitting and build partnerships with utility companies to coordinate tree planting activities and minimize underground conflicts.
- e. Provide trainings to educate project planners, tree planting crews, and residents on proper tree planting and aftercare.
- f. Prioritize translated materials and language interpretation services during training sessions and program meetings.
- g. Secure ongoing funding for jurisdictions to follow through on tree establishment care and monitoring of newly planted trees.
- h. Track and monitor the number and location of trees planted and survival to assess tree planting success.

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Upfront investment in the survival of newly planted trees will pay dividends by creating a strong, healthy urban canopy and mitigating the heat island effect.

Implementation Partners: Local jurisdictions, the Urban Forestry Forum (see Action 11: King County Tree Code Toolkit for more information), community-based organizations, King Conservation District, professional landscape architects, tree planting and tree care service providers (certified arborist and landscaping companies), Pacific Northwest Chapter of the International Society of Arboriculture.

Action Typology:



Implementation Feasibility: 🔅 🔅

Timeline for Community Benefits (Benefits): 3+ years (more equitable tree canopy coverage; stronger regional coordination and alignment; lower greenhouse gas emissions; air quality, water quality, and other ecosystem benefits; reduces heat island effect).

Alignment to Community Priorities: N/A



Figure 23. Proper soil volume, staking, mulching, and watering help newly planted trees survive and establish to a healthy mature state. *Photo source: King County.*

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Category 3: Cool Our Neighborhoods

ACTION 11: King County Tree Code Toolkit Develop and support application of a King County Tree Code Toolkit.

To ensure the health, safety, and sustainability of the urban forest, local jurisdictions often develop tree regulations and guidelines to manage maintenance, removal, planting, and protection of trees within a specific area. This action calls on King County to work with partners to build upon existing best practices in tree regulations to further develop and support implementation of a "Tree Code Toolkit" to assist cities in King County, and potentially beyond, in their efforts to craft or revise tree regulations.

Retaining tree canopy has become increasingly important and challenging as development intensifies in the King County region. Between 1990 and 2020, the population of King County surged by 50 percent, growing from 1.5 million residents to 2.26 million residents.⁴⁷ Another 660,000 people are projected to move into King County by 2044.⁴⁸ Local jurisdictions are in the position of needing to simultaneously sustain and increase tree canopy while also accommodating increased housing needs.

Local ordinances that govern tree canopy play a vital role in achieving this balance. However, tree codes established and enforced at the local jurisdictional level vary in structure and complexity. While some



The King County Urban Forestry Forum

In 2021, King County's Department of Natural Resources and Parks (DNRP) introduced the <u>30-Year Forest Plan</u>, highlighting Urban Forest Canopy as one of seven priority areas. DNRP initiated the Urban Forestry Forum in 2022 to advance the Plan's goals and to foster collaboration on county-wide urban forestry objectives. The Forum facilitates the exchange of information, strategies, successes, and challenges related to urban forestry among King County and the 39 incorporated cities and towns in the county. The Forum is comprised of staff from King County and municipalities dedicated to tree management, regulation, and preservation. The Forum covers urban forest management topics including tree ordinances, street tree maintenance, incentive programs, best practices, private property engagement, climate action plans, and ongoing canopy assessments.

Photo source: King County

cities have recently updated their regulations to align with citywide goals for housing, canopy, and environmental health, others may lack resources to do so.

To assist local jurisdictions in navigating these challenges, King County conducted a tree code analysis synthesizing best practices for tree regulations for private land. The resulting *Guide to Developing Effective Urban Tree Regulations on Private Property (Guide)*, released in April 2024, provides jurisdictions with insights, best practices, and recommendations to consider when crafting effective tree regulations and facilitating tree ordinance adoption.

This action seeks to build upon the analysis and recommendations in the Guide by having King County and local partners develop a Tree Code Toolkit inclusive of the following:

- a. A tree ordinance framework;
- Example tree codes for both public and private trees, including methods for calculating tree retention and defining significant trees;
- c. Community engagement strategies;
- d. Ways to integrate tree codes with broader urban forestry initiatives; and
- e. Implementation resources such as maintenance agreements, educational materials, and protocols to support effective implementation and enforcement of tree regulations.

Local government support for implementing the Toolkit will be important. Crafting effective tree codes is not a one-size-fits-all endeavor, as each city's needs, priorities, and goals are unique. Moreover, some cities may lack the capacity and resources necessary for this process.

Promotion and implementation support of the Toolkit will occur through the King County Urban Forestry Forum (see box). Support will include outreach, resource development, and technical assistance. It will also be important to update and make additions to the Toolkit to reflect evolving practices and standards in urban forestry. Combining regulations with tree planting programs and technical and financial assistance for tree care (see <u>Action 9: Private Property Tree Care</u>) can help alleviate barriers and cost burdens associated with trees, enhancing tree canopy, and mitigating extreme heat in frontline communities.

Implementation Partners: King County, the Urban Forestry Forum, local jurisdictions (in particular, urban forestry staff), King Conservation District, subject matter experts such as urban forestry staff, consultants, and arborists on the local and national level.

Action Typology:



Implementation Feasibility:

Timeline for Community Benefits (Benefits): 1 – 3 years (more equitable tree canopy coverage; stronger regional coordination and alignment; reduces heat island effect).

Alignment to Community Priorities: N/A

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Category 3: Cool Our Neighborhoods

ACTION 12: Track Equitable Canopy Cover Support local efforts to identify, track, and achieve tree canopy goals.

One of the most valuable tools available to local jurisdictions and community stakeholders for understanding, managing, and enhancing the ecological, social, and economic benefits of urban trees is an Urban Tree Canopy (UTC) assessment. This action seeks to equip jurisdictions and communities with the tools and support needed to identify, track, and achieve tree canopy goals, particularly in low canopy areas affected by or vulnerable to high heat events.

UTC assessments systematically evaluate the extent and distribution of tree cover within an urban area. UTC assessments also assess the health, species composition, and spatial distribution of the urban tree canopy. The assessment involves collecting data through various methods such as aerial imagery analysis, field surveys, and remote sensing technologies to quantify the percentage of land covered by trees. These assessments help identify disparities in tree canopy coverage and areas suitable for planting, especially in relation to identified heat areas. Repeated assessments can help jurisdictions track tree canopy over time and inform ongoing project implementation.

As technology for canopy cover mapping and analysis evolves, navigating the myriad options and tools available can be daunting. Moreover, some jurisdictions lack the resources to comprehensively set and track canopy goals essential for equitable distribution across neighborhoods and management zones. This emphasis on equity is critical given the disproportionate impact of high heat events on marginalized communities.

To better equip jurisdictions with the tools needed to achieve their tree canopy goals, this action calls on local agencies and organizations to address the following needs:

- a. Consistent, standardized and comparable canopy cover and plantable space data developed using replicable methods;
- b. Collaboration to acquire County-wide Light Detection and
 b. Ranging (Lidar) mapping and aerial imagery, updated at regular intervals;
- c. Guidance on using data to set granular tree canopy goals and strategies by neighborhood and land-use types;
- d. Updated UTC assessment every five years;
- e. Translation of data into plans with specific goals and strategies that address high heat and low canopy neighborhoods;
- f. Effective ways to communicate UTC assessment results and trends to agency leadership and the public; and
- g. Staff capacity to act and implement projects based on results.

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Embracing technology and information can help cities leverage funding opportunities and partnerships to sustain and expand urban forests. Canopy cover assessments also serve as tools for outreach and education, fostering public understanding and appreciation of urban forestry. Implementation of this action will prioritize communities needing canopy enhancement to help mitigate the effects of high heat events.

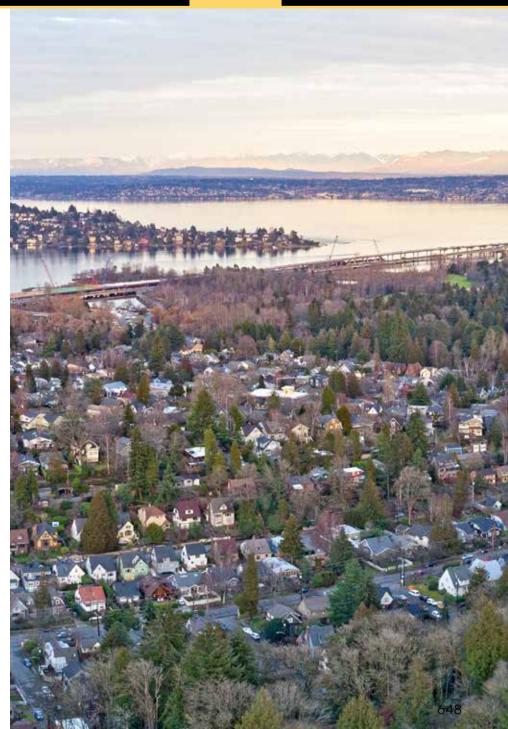
Implementation Partners: King County, the Urban Forestry Forum (see callout box in Action 11: King County Tree Code Toolkit for more information), local jurisdictions, King Conservation District, Washington State Department of Natural Resources, local urban forestry non-profits, urban forestry subject matter experts (such as consultants and arborists) that specialize in UTC assessments.

Action Typology:

Implementation Feasibility: 🔅 🔅

Timeline for Community Benefits (Benefits): 1 - 3+ years (more equitable tree canopy coverage; stronger regional coordination and alignment; reduces heat island effect).

Alignment to Community Priorities: N/A



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ACTION 13: Open Space Access

Protect, increase, and maintain accessible open space, particularly in heat islands.

One of the key markers of heat islands is a lack of tree canopy and open space (specifically parks, natural areas, forested areas, and similar areas) relative to cooler locations. Hotter areas of the county also have a higher proportion of residents living below 200 percent of poverty level.

This action supports reduction of the heat island effect by increasing, protecting, and maintaining accessible open space, particularly in lower income communities and identified heat islands. This action also seeks to avoid the creation of new heat islands by preserving and expanding existing open space.

"Having these accessible green spaces will improve our physical, emotional, and community health; and they are important to the resiliency of our neighborhoods given the changing climate and a future of extreme weather events."

-- King County Open Space Equity Cabinet (<u>Recommendations to King County Executive and Council</u>, 2019, p.3)

Implementation will leverage collaborative approaches involving King County, local governments, and community partners as well as actions that can be implemented by individual jurisdictions. Implementation includes the following:

- 1. Increase and protect open space via acquisition. The King County Land Conservation Initiative (LCI) is a collaborative effort led by King County to preserve and protect high conservation value lands and to reduce open space inequities in low-income communities. Many areas designated as LCI Opportunity Areas for open space acquisition are co-located in mapped heat islands (Figure 24), creating opportunities to reduce the heat island effect while increasing access to green space. The LCI can also help prevent the creation of new heat islands by protecting existing open space from development. To help support heat mitigation objectives, the LCI will:
 - a. Integrate heat mitigation as an additional criterion by which land should be prioritized for acquisition.
 - b. Explore land-banking as an approach to preserving and expanding natural areas within urban locations. Land-banking recognizes that sometimes, conserving open space must be opportunistic and occur before resources are secured for programming and activation. Land-banking protects natural areas in a caretaker status, preserving not only the environmental benefits offered by that space, but also the opportunity for future recreational planning in partnership with the community.

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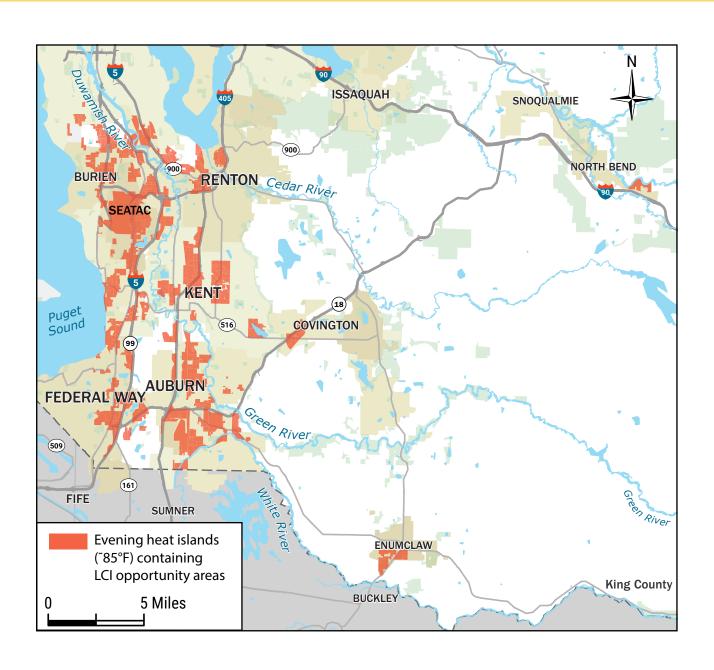
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between Land Conservation Initiative Opportunity Areas and mapped heat islands, with a focus on areas where median evening temperatures were 85°F or higher based on data collected between 7-8 p.m. on July 27, 2020. Opportunity Areas are locations where households lack open space access and simultaneously fall in the bottom third of census tracts for household income and top third of census tracts for hospitalization rates due to asthma, diabetes, and heart disease.

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- 2. Utilize depaving to reduce impervious surface and create space for urban greening. Removing or reducing the amount of impervious surface through depaving may be needed to create more space for trees, green space, and low-impact development such as green stormwater infrastructure. Depaving can be integrated into redevelopment projects or pursued as standalone projects proposed by and implemented in partnership with communities. Local and county governments can promote and support depaving by:
 - a. Working with the Washington State Department of Transportation, King County Roads, and local departments of transportation to identify potential de-paving opportunities within the public right-of-way.
 - b. Working with local property owners (especially large commercial parking lots) to retrofit parking lots via depaving for green stormwater infrastructure.
 - c. Providing private property owners with financial incentives to depave hardscapes like driveways and parking lots. Financial incentives can include rebates, cost-sharing options, and reductions in stormwater taxes and fees.
 - d. Including depaying as part of a green jobs training program to grow workforce skills for depaying strategies.
- 3. Leverage planned investments in stormwater parks and green stormwater infrastructure to increase green space and access to shaded outdoor spaces in heat islands. King County's



Figure 25. McKinley Hill Neighborhood depaving project, Tacoma, Washington. *Photo source:* <u>Pierce Conservation District</u>.

regional Stormwater Investment Plan includes the goal of building 30 stormwater parks by 2050 to help address stormwater management needs in King County. To help maximize heat mitigation benefits associated with these projects, King County will incorporate heat mitigation as a co-benefit when siting and designing projects. Additionally, King County will use the following best management practices when planning stormwater parks located in heat islands:

a. Incorporate the maximum amount of shade-providing trees (based on mature size estimates) into site design.

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- b. Ensure project funding includes long-term maintenance funding to maintain planted trees.
- c. Ensure early engagement with the local community to ensure project plans align with local interests for heat mitigation and other co-benefits.
- d. Follow best practices for heat when designing playground features or other public amenities to be included in a stormwater park (see Action 16: Heat Smart Parks and Playgrounds).

In addition to the activities noted above, it is important to expand support for efforts to restore and care for existing forested parks and natural areas. Restoration and maintenance of forested areas brings together thousands of volunteers each year through regional efforts coordinated by local governments, community members, businesses, and coalitions such as the Green City Partnerships. Continued investment in this work will help ensure that existing green space is protected and enhanced in ways that provide benefit to nearby communities.

Implementation Partners: King County, Department of Natural Resources and Parks, local jurisdictions, community-based organizations, and non-governmental organizations, such as the Nature Conservancy, Stewardship Partners, the Puget Sound Regional Council, the South-Central Local Integrating Organization, and other related organizations.

Action Typology:



Implementation Feasibility:

Timeline for Community Benefits (Benefits): 3+ years (more equitable access to green space; expanded recreation opportunities; improved air quality, water quality, and other ecosystem benefits; reduces heat island effect; workforce development).

Alignment to Community Priorities:





Figure 26. Madison Valley Stormwater Park, Seattle, WA. Stormwater parks provide water quality treatment for stormwater runoff while also adding neighborhood green spaces. Photo source: Seattle Public *Utilities, Stormwater Parks & Ponds — Shape Our Water*

and physical education instructors.



ACTION 14: Cool Schools

Increase heat resilience of local schools and learning centers through a Cool Schools Initiative.

Climate change is increasing the likelihood of seeing high temperatures when school is in session (specifically in May, June, and September) and during summer school programs. At the same time, many schools and learning centers in King County lack air conditioning. This action seeks to increase heat resilience in schools and early learning centers via support for a suite of activities collectively referred to as the Cool Schools initiative.

Classrooms (particularly south and west facing classrooms) without air conditioning can get uncomfortably hot during heat events, potentially affecting student learning and the health of staff and students in those classrooms. ⁴⁹ The buildup of heat in buildings can also affect janitorial and maintenance staff who are often working in the building after school hours. This risk is heightened for schools located in identified heat islands with fewer shade trees and large areas of pavement (e.g., parking lot or paved play areas).

The Cool Schools initiative takes a multi-faceted, partnership-based approach to heat mitigation in schools and early learning centers.

The approach provides a flexible way for education partners to opt-in

to initiative activities in collaboration with local and state partners, where relevant. The initiative includes:

- 1. Providing training and information resources related to heat. This includes developing and distributing age-appropriate, multilingual educational materials on heat and health, ways to stay cool in the heat, and resources for families (see also Action 17: Multilingual Communications). Staff trainings could include information on ways to manage heat in the classroom, options to cool facilities for maintenance and operations staff, and recognizing and responding to heat-related illness for coaches
- 2. Promoting infrastructure upgrades and maintenance. This includes supporting school district staff in establishing optimal routine heating, ventilation, and air conditioning (HVAC) system assessments and to identify grants for HVAC improvements. Assessments can also consider other infrastructure upgrades, such as use of reflective building materials, passive cooling retrofits, and renewable energy systems.
- **3.** Increasing green spaces and shading on school campuses. This includes the following, where feasible: planting trees to promote campus greening and shading, reducing the amount of paving in proximity to the school building, and installing shade structures (such as solar canopies) in paved areas, for example.
- **4.** Incorporating heat resilience in policies and facility design standards. This includes integrating heat mitigation best practices into school design projects and standards as part of building

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replacement or major site updates. Similar to Action 16: Heat Smart Parks and Playgrounds, this can also include heat safety practices for designing and upgrading playground equipment in schools. Through this work, partners could also identify and work to advocate for changes in local and state policies needed to support climate resilient school design, including funding for HVAC upgrades, building envelop improvements, and green space development.

5. Supporting Cool Schools implementation. This includes identifying and creating funding sources and professional development opportunities to assist school and early learning staff in implementing the listed activities. Options can include infrastructure assessment and upgrade grants to assist staff in evaluating facility needs and in prioritizing where capital improvements should be focused. Additionally, investment in professional development trainings focused on sustainable design, green building practices, and climate adaptation strategies can build capacity and facilitate staff leadership in Cool Schools activities.

Implementation of the above actions could have the most benefit for older facilities located in identified heat islands to address the most at-risk communities. The initiative also seeks to incorporate cobenefits with other weather and pollution-related concerns (such as wildfire smoke) and energy reduction goals of schools. The included activities can be updated to include best evidence-based practices that emerge from future research and shared learning.

Implementation Partners: King County, local jurisdictions, school districts, local schools, early learning facilities, Public Health – Seattle & King County, Washington State Office of Superintendent of Public Instruction.

Action Typology:



Implementation Feasibility: * - * * *

Timeline for Community Benefits (Benefits): 0 - 3+ years (direct support for higher-risk communities; lower greenhouse gas emissions; increased public awareness; improved air quality, water quality, and other ecosystem benefits; reduces heat island effect).

Alignment to Community Priorities:





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Category 4: Design for Heat

ACTION 15: Building and Development Codes Reduce heat impacts through effective building and development codes and policies.

Building and development codes and policies are foundational to addressing heat in the built environment. This action calls on King County, local jurisdictions, and other partners to develop and adopt heat resilient building standards and development codes to reduce heat impacts on health and adapt the built environment for heat.

Building codes. Housing conditions play an important role in protecting the health of individuals during extreme 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. ⁵⁰ Building codes require every new structure, altered structure, or built element to meet a minimum standard by law. Developing codes that improve thermal comfort or increase heating and cooling efficiencies help to 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.

Recognizing the importance of building codes in supporting heat resilience, this action includes the following activities related to building codes:

1. Develop a King County heat mitigation building code package.



New Buildings Institute Heat Code Overlay

The New Buildings Institute (NBI) released the Extreme Heat and Urban Heat Island Code Overlay in March 2024, providing building code language for reducing the impact of extreme heat and urban heat islands. The overlay strengthens and expands cool surface requirements in energy codes and standards with a focus on building surfaces (i.e., "cool surfaces" installed to reflect sun and heat away from a structure), building sites (e.g., installing cool and/or permeable pavement, vegetation and shading), and cooling equipment (using passive cooling strategies to reduce the need for mechanical cooling equipment like air conditioners). Recognizing that climate change has increased the need for cooling to be a basic health and safety requirement in all new buildings, the overlay also adds maximum indoor temperature to the language of the 2021 International Mechanical Code, 2021 International Residential Code (IRC), and 2024 International Building Code (IBC). Photo source: King County

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King County will convene subject matter experts through the Regional Code Collaborative (RCC) to develop the necessary building codes. Drafters of the code package will be able to adapt and build upon an existing compendium of model building codes for heat created by the New Buildings Institute in 2024.

- 2. Promote adoption of model codes in the State Building Code. Building code changes affecting small residential buildings must be made through the Washington State Building Code Council (SBCC)⁵¹ amendment process. The SBCC amendment process occurs two of every three years of the code cycle, with the next update beginning in 2024. Active engagement in this code cycle will require providing testimony to the SBCC, participation in relevant stakeholder group meetings (Technical Advisory Groups, Committee, and Council), and coordinating sign-on letters of support.
- Support King County jurisdictions in adopting codes locally as **needed.** Any code not approved by the state via the SBCC process can be adopted locally, as able. Codes not approved by the state will need concerted effort from local jurisdiction staff to be adopted at the local level. To adopt these codes, local jurisdictions will require funding and capacity support from County and state partners.

Integrating heat mitigation into building codes ensures more King County residents have access to green building benefits, not just those with economic means. Additionally, the anticipated building codes will have co-benefits with building decarbonization,

reducing greenhouse gas emissions, and smoke and indoor air quality improvement.

Development codes. Development codes and policies shape how communities grow and adapt over time, influencing issues like building density, how and where development occurs, and availability of open space, for example. This action calls on county and local governments to review and update development codes and policies to address gaps, barriers, or opportunities related to mitigating extreme heat impacts in the built environment, such as Cool Corridors.

Implementation Partners: King County, local jurisdictions, climate associations such as Shift Zero and Climate Solutions, communitybased organizations, supportive building industry partners and manufacturers, affordable housing developers.

Action Typology:



Implementation Feasibility: 🐞 🐞

Timeline for Community Benefits (Benefits): 1 – 3+ years (lower greenhouse gas emissions; reduced heat island effect; cooler, more energy efficient residences; stronger regional coordination and alignment).

Alignment to Community Priorities: N/A

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Cool Corridors

Responding to and preparing for the effects of climate change guides the City of New York's policies in a variety of ways. The New York City Panel on Climate Change's most recent assessment reports that New York City will see changes in temperature, precipitation intensity, and sea level resulting in greater hazards from extreme heat, extreme rainfall, coastal storm surge, and chronic tidal flooding. In 2021, the New York City Department of Transportation was granted funding from FEMA's Building Resilient Infrastructure and Communities grant to develop a Cool Corridors toolkit. Cool Corridors are streets with features that help lower ambient temperatures and provide relief from extreme heat to street users. These features include shade canopies, trees, and reflective surface treatments which lower the air temperature and fans, drinking fountains, and water misters which lower users' body temperature. Used in combination along a corridor, these features can have a great impact. DOT's Cool Corridors Toolkit will serve as a 'design manual' that is based on observed infrastructure in New York City, domestically, and internationally, where successful heat mitigation is occurring through urban design and new street furnishings. The final report will include a cost-benefit analysis of Cool Corridors in concept to determine their most costeffectiveness. The toolkit is expected to be finalized by the end of 2024 and will be used to inform how the City of New York can better prepare our streets, sidewalks, and public spaces to combat extreme heat.

Summary courtesy of Z. Youngerman, New York City Dept. of Transportation

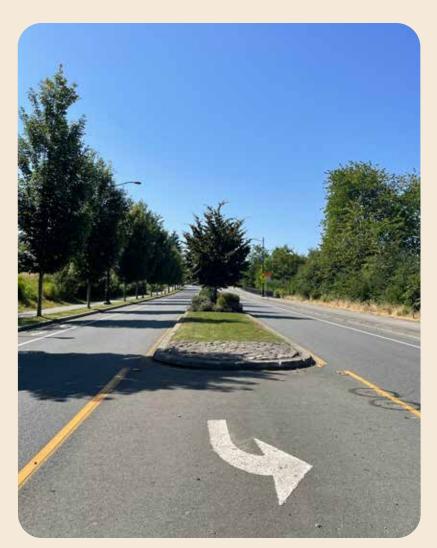


Figure 27. Including trees, reducing impervious surfaces, and adding other cooling amenities can help reduce the heat island effect in King County. *Photo source: King County.*

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Category 4: Design for Heat

ACTION 16: Heat Smart Parks and Playgrounds Design and activate parks and playgrounds for heat.

Parks and playgrounds are frequently preferred outdoor locations for cooling off when it is hot, particularly for youth, families with young children, and other residents who lack air conditioning and who are looking for a low or no cost alternative to hot indoor temperatures. This action calls for integrating heat resilience into parks and playground design and programming to enhance the role that local parks and playgrounds serve as cool spaces when it's hot, particularly for lower income communities who live in identified heat islands.

Community engagement participants frequently cited parks as the most likely place they would go when it is hot outside. Participants also identified heat-related improvements to parks as a priority for the strategy. While parks typically have mature trees or shelters that can provide shade, newly acquired park properties, smaller neighborhood parks, and parks in underserved communities may not have sufficient shade or other features to provide cooling during heat events. This can exacerbate heat risks for parks visitors, including children, pregnant people, and seniors.

This action calls for integrating heat resilience into parks and playground design and programming, with emphasis on areas in identified heat islands and low-income communities.

Tree Retention at Riverview Park, Snoqualmie

A recent project at Riverview Park aimed to replace aging playground equipment while maintaining and enhancing canopy cover and shade around the playground. Five mature trees were preserved by protecting their Critical Root Zones (CRZ) including a Norway maple directly adjacent to the playground. Two smaller trees were removed. Seven new trees were planted, including coastal redwood, swamp white oak, yellowwood, and blue Atlas cedar.



Figure 28. A new playground in Riverview Park, Snoqualmie. Construction of this park included preservation of preexisting trees and planting of new trees to improve shading. *Photo source: City of Snoqualmie*

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Implementation includes the following:

- 1. Develop and implement best practice guidelines for designing and/or retrofitting parks and playgrounds for heat. King County will work with local parks departments, landscape architects, and community partners to develop and promote locally relevant heat design guidelines and best practices for parks and playgrounds. This includes guidelines and best practices related to building materials for park and playground features, landscaping, access to water and/or water features, seasonal shading, and reducing impervious surfaces (including depaying).
- 2. Incorporate heat safety programming and amenities in parks during summer months. As community gathering spots, parks provide valuable opportunities for sharing information on heat and heat safety. This may include multilingual seasonal placarding to raise awareness about the signs of heat illness and how to stay cool when recreating outdoors in summer. This may also include erecting portable shade structures at parks and/or hosting mobile cooling stations that offer water, popsicles, and other "cool treats" to parks visitors during heat events.
- Increase access to recreational areas that contain pools, water features, or beaches. Parks programs should extend hours of operation for supervised, water-based recreation areas during heat events, where possible. This includes wading pools, public swimming pools, and beaches. See Action 6: Drowning Prevention for related water safety recommendations actions. This may also include integrating temporary or fixed water features such as splash pads or misters.

Additionally, implementation should be planned in partnership with local communities to ensure that features and planned activities are responsive to local needs.

Implementation Partners: King County Department of Natural Resources and Parks, local jurisdictions/parks and recreation programs, landscape architects, community-based organizations and neighborhood groups, local youth, parks supporters (private/ foundation funders).

Action Typology:



Implementation Feasibility: 🐞 🔅 🌞

Timeline for Community Benefits (Benefits): 0 - 3+ years (direct support for higher-risk communities; recreation benefits; stronger regional coordination and alignment; reduces heat island effect).

Alignment to Community Priorities:



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ACTION 17: Multilingual Communications Develop and support distribution of inclusive, multilingual materials related to heat preparedness and mitigation.

Understanding how heat can affect health and what steps can be taken to reduce heat-related health impacts is critical to building individual and community resilience to heat. Language and other barriers can limit the reach of this information, however. To support increased awareness of these impacts in local communities, this action calls for developing and increasing the distribution of multilingual and culturally relevant heat safety and preparedness information in King County.

While the availability of heat and health information, including inlanguage resources, has increased in recent years (see Figure 29), additional work is needed to help ensure that information is reaching households and communities with limited English proficiency, many of whom live in the hottest areas of the county. Analysis of King County's heat island map shows that the top 20 percent hottest areas in King County have the highest proportion of limited English-speaking residents over the age of 18 relative to other mapped heat areas.

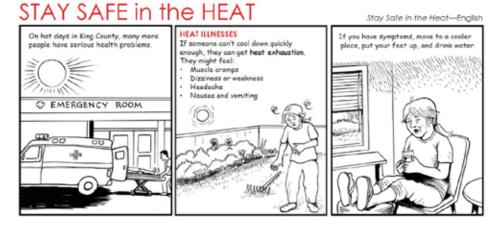




Figure 29. English and Somali images from the <u>Stay Safe in the Heat mini comic book</u> designed by PHSKC and University of Washington. It provides guidance for preventing heat illness during hot weather, and it is available in 11 different languages apart from English. *Figure source: Public Health – Seattle & King County.*

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This action calls on King County, local governments, service organizations, community-based organizations, and public and private information networks to work together to:

- 1. Co-create more comprehensive and culturally relevant heat preparedness and mitigation content. Heat resilience information can be more effective and inclusive when co-created with community partners. This work includes partnering with community-based organizations, service providers, and others to evaluate community needs and priorities for heat messaging, as well as developing or supporting development of heat safety preparedness and safety materials with those partners.
- 2. Expand public, private, and community networks and formats for distributing heat safety and preparedness messaging prior to and during heat waves. This includes partnering with community and multilingual media and other community-trusted information providers to adapt and share heat safety information in a variety of languages and multimedia formats. The importance of heat safety and heat mitigation should be integrated into messaging and programming prior to summer months to help communities prepare early for high temperatures and to ensure residents can purchase cooling items, such as portable air conditioning and fans, during off-seasons when they are less likely to be sold out. This work should also include a focus on how to effectively utilize information channels to support time-sensitive messaging during a heat wave, direct residents towards local resources near their living area, and inform individuals of low-cost alternatives to suggested interventions.

While heat and health safety are a major focus of this action, this action will also support multilingual information needs called out in other parts of this strategy. These include the co-creation of multilingual resources related to:

- a. Increased in-home heat safety support for low-income seniors, people with disabilities, and homebound individuals (Action 1: In-Home Heat Safety);
- b. Urban tree canopy management (Actions 9-12); and
- c. Expanding access to weatherization, energy efficiency, and utility bill payment assistance (Action 2: Energy Efficiency and Utility Bill Assistance); and other actions.

Materials will also be added to the extreme heat online clearinghouse (see <u>Action 19</u>: <u>Partnerships for Implementation</u>) to facilitate access.

Implementation Partners: King County (including Emergency Management's Trusted Partner's Network), Public Health–Seattle & King County (including Community Navigators), local jurisdictions, community-based organizations, utilities, service providers, media/community and multilingual media, neighborhood/community groups or advisory boards.

Action Typology:



Implementation Feasibility: 🔅 🔅 🔅

Timeline for Community Benefits (Benefits): 0 - 1 years (direct support for higher-risk communities; increased public awareness; building local capacity).

Alignment to Community Priorities:



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ACTION 18: Heat Resilience Trainings

Create and administer trainings to help educate communities on heat safety and preparedness.

Community-based organizations and service provider staff who work directly with heat-sensitive populations, and/or caregivers of those community members, are uniquely positioned to help provide information and training within their communities on identifying and mitigating heat-related risks.

This action seeks to leverage health and training expertise within Public Health–Seattle & King County, community-based organizations, service providers, and other partners to develop heat safety and preparedness curricula for use in public programming and trainings. Work on this action includes the following activities:

1. Develop a Community Climate Resilient Housing Curriculum.

Public Health–Seattle & King County will develop a comprehensive climate resilient housing curriculum inclusive of extreme heat for use during community outreach and engagement events and/ or as part of service provision. The curriculum will be designed to raise resident awareness of factors, features, behaviors, and actions that benefit extreme weather risk reduction at home.

A "train the trainer" model will be developed to help partners understand and teach curriculum components to their community members, helping to extend the reach of information within

communities. Curriculum materials and training opportunities will include a focus on renters and the challenges they can face in adapting their living spaces for heat and will emphasize serving low-income and median-income households.

- 2. Create additional heat safety awareness and preparedness trainings. In addition to the Community Climate Resilient Housing Curriculum, Public Health–Seattle & King County will work with partners to develop training materials to help community-based organization staff identify and treat heat-related illness, raise awareness of and cope with the potential mental health impacts of heat, identify and connect residents to opportunities and resources that can provide heat relief, and help residents manage co-occurring hazards that can occur with a heat event, such as wildfire smoke, power outages, and food safety. Training adaptations may include conversion to multimedia content, creation of online modules, and customized in-person sessions, in addition to in-language resources.
- 3. Provide a training point of contact for community organizations. Community partner organizations engaged during strategy development noted the need for a trusted, sustained point of contact for questions about training content. Public Health–Seattle & King County will designate a point of contact to provide public support on the training and outreach materials developed for this action.

All materials and trainings for this action will be developed through a multipronged, culturally informed, and language accessible

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approach, consistent with Action 17: Multilingual Communications. Funding support for frontline community participation in the development and implementation of heat safety trainings will be required.

Implementation Partners: Public Health-–Seattle & King County, Sound Generations Elder Education Institute, Seattle Public Library, community-based organizations, King County Department of Community and Health Services, King County Housing Authority, local governments.

Action Typology: 🔎



Implementation Feasibility: 🔅 🔅

Timeline for Community Benefits (Benefits): 0 - 3 years (direct support for higher-risk communities; increased public awareness; building local capacity; workforce development).

Alignment to Community Priorities: (





Figure 30. Co-developed trainings between local government staff and community-based organizations can increase outreach and awareness of culturally relevant and community-specific heat safety information. *Photo source: King County.*

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ACTION 19: Partnerships for Implementation

Build partnerships and coordination around strategy implementation and funding.

Development of this strategy has identified the need for continued collaboration with local jurisdictions, community-based organizations, service providers, and other partners to share learnings about extreme heat, to leverage resources, and to increase coordination around implementing listed actions. Recognizing this, King County will:

- 1. Work with implementation partners to finalize strategy performance measures. To support ongoing evaluation of strategy implementation and effectiveness, King County will work with implementation partners to finalize a performance measurement framework for the strategy. The goal is to create a shared framework for measuring action implementation and outcomes that can be used within and/or across implementing organizations, facilitating measurement tracking over time and across efforts. Potential performance measures identified as actions were developed will be used to inform this work.
- **2.** Support opportunities for joint implementation and funding. As more communities look to engage in specific strategy actions,

King County will seek opportunities to bring local partners with shared action interests together to work collaboratively on implementation. This includes partnering on joint funding proposals to support action implementation. Additionally, King County will create or support ongoing opportunities to build collective knowledge and action on:

- a. Extreme heat impacts and equitable mitigation practices;
- b. Local heat preparedness activities and resource needs for action implementation;
- c. Gaps in heat data and potential collection methods;
- d. Opportunities for outreach, engagement, and involvement of additional partners;
- e. Funding opportunities; and
- f. Evaluation of heat strategy action outcomes.

Existing forums will be utilized where available.

3. Develop an online resource page to support Heat Strategy implementation. Planned and anticipated site content includes information on and/or links to information on local planning activities, outreach and engagement materials, funding opportunities, data, best practices, and case studies. Site content will include content developed specifically for the strategy and new and existing resources developed by partner programs and agencies.

Implementation Partners: King County, state and local jurisdiction stakeholders, community-based organizations, service providers.

Action Typology:



Implementation Feasibility: 🔅

Timeline for Community Benefits (Benefits): 0 - 3+ years (stronger regional coordination and alignment; building local capacity).

Alignment to Community Priorities:





Figure 31. Tabling at the Rainer Beach Health and Wellness Festival, April 2022. Photo source: King County

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ACTION 20: Support Community Solutions Support implementation of community-determined solutions for heat.

The King County Extreme Heat Mitigation strategy provides a comprehensive set of actions and activities developed with local jurisdictions, community-based organizations, frontline community members, and other partners. Additional solutions—many of which are based in the lived experiences and knowledge of local communities and service providers—exist outside the scope of this strategy.

This action addresses expressed interest from frontline community partners for continued opportunities to stay connected on heat mitigation activities and support for future community-determined heat mitigation solutions. More specifically, this action calls on King County and local government staff to uplift community-determined solutions by:

- Developing or leveraging existing community-based organization and service provider network(s) for sharing relevant information, data, and tools for heat mitigation solutions.
- b. Connecting community organizations to local, state, and federal funding and partnership opportunities.

- c. Providing technical support for the development of individual or joint community-based grant applications and/or by serving as a grant partner for those applications.
- d. Directly funding community projects through new or existing programs and/or grant opportunities.

King County's <u>Community Climate Resilience Grant program</u> could potentially support implementation of heat-related activities. Additional opportunities beyond 2025 will be explored as part of strategy implementation.

Implementation Partners: King County, local governments, community-based organizations, service providers, philanthropy.

Action Typology:



Implementation Feasibility: * - * * *

Timeline for Community Benefits (Benefits): 1 – 3 years (direct support for higher-risk communities; building local capacity).

Alignment to Community Priorities:



NEXT STEPS AND FUTURE CONSIDERATIONS

The King County Extreme Heat Mitigation Strategy identifies 20 actions prioritized for implementation by local and county governments, community-based organizations, service-based organizations, and other partners over the next five years (2024-2029). Some actions, or specific activities within actions, can be completed before 2029 while other actions represent ongoing work and/or will take longer to fully implement.

Implementation partner readiness to start or expand their work on heat varies. While many organizations are already involved in heat work, time will be required to build additional individual and collective capacity to implement many strategy actions. When implementation occurs and by whom will reflect a combination of considerations, including:

- Action status and type: Actions that accelerate or scale up existing efforts may be easier to initiate or build on in the near term relative to new or emerging actions.
- Implementation feasibility: Actions that are easier to implement may be started sooner relative to other actions. At the same time, work on actions that are difficult to implement should begin as soon as feasibly possible given the time required to implement those actions.
- Alignment with organizational priorities and near-term work planning: Some actions may align with exiting organizational priorities, planned work, resourcing, or responsibilities. As a

- result, work on those actions may begin sooner relative to other actions.
- Windows of opportunity: Grant opportunities, changes in local and state policies, and new partnerships may create unique "windows of opportunity" for advancing specific actions and activities.

Table 1 provides an overview of key implementation considerations that organizations can use to start identifying opportunities and entry points for strategy implementation. Mapping out implementation at the organizational level can help identify where an organization can start work on the heat strategy and how to strategically build in additional capacity and activities. To that end, King County will develop a strategy implementation plan in 2024 specific to County operations that identifies:

- · Roles and responsibilities relative to strategy activities,
- Key partners and community engagement needs,
- · Multi-benefit and leveraging opportunities, and
- Timelines, steps, and implementation targets for sequencing work within and across actions.

A template for this implementation plan will be provided to other implementation partners to support similar mapping.

To help ensure further progress on shared priorities, strategy actions should be integrated into county and local planning documents,

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policies, budgets, and work plans, where relevant. This additional level of integration can drive countywide coordination on heat action, draw additional funding and staff capacity to the work, and support initiatives with multi-benefit outcomes.

As convener and author of the strategy, King County will be the steward of the strategy, tracking overall implementation and working with stakeholders to leverage opportunities and partnerships, address barriers to action, and evaluate the need for future updates to the strategy. Markers of implementation success for the strategy as a whole by 2029 include:

- More jurisdictions and organizations are engaged in heat mitigation work and are using the strategy to inform that work.
- A framework for tracking implementation is in place and being used.
- Work is happening across all strategy actions.
- Frontline community members, community-based organizations, and service partners are engaged in strategy implementation.

Refining performance measurement for individual actions and outcomes will continue in 2024-2025 as part of strategy implementation and will be used to measure progress on individual actions or action categories going forward (see Action 19: Partnerships for Implementation).





Development of this strategy identified several areas of future research and planning to foster countywide heat resilience. King County will continue to explore heat impacts and initiatives in the following areas:

- Seeking sustainable funding to implement initiatives. Research and interviews conducted by students from the University of Washington Evans School of Public Policy and Governance identified the need to build heat resilience into local government budgeting and long-term programming as well as the need to engage with state and federal agencies (such as the Washington State Department of Commerce and the Federal Emergency Management Agency) to integrate extreme heat as a criterion for funding opportunities.
- Uplifting solutions to benefit community connectivity for heat resilience.
 Community engagement revealed the need to promote social connectivity as a method of heat resilience. Noted ways to encourage connectivity included strengthening community networks related to heat preparedness, promoting, culturally relevant foods used to stay cool, and

Table 1. Overview of key information about each action. This table is intended to assist strategy readers in selecting relevant actions for their community.

		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
Action Title		Includes others not listed here.	As identified in community engagement.	Additional benefits may apply. Timeline refers to time after action implementation.	For tracking implementation progress and outcomes. Not final measures.
1	: HELP PEOPLE STAY COOL & SAF	E INDOORS			
1	In-Home Heat Safety: Increase access to portable air conditioning and in-home heat safety support for low- income seniors, people with disabilities, and homebound individuals.	King County, local governments, housing authorities, local service providers, community- based organizations	X	Direct support for higher- risk communities Increased public awareness Building local capacity 0 – 3 years	Number of residences that receive cooling support New/enhanced organizational partnerships established to support this work
2	Energy Efficiency and Utility Bill Assistance: Expand access to weatherization, energy efficie y, and utility bill payment assistance.	Utilities, King County, local governments, community- based organizations	x	Direct support for higher- risk communities Building local capacity Lower greenhouse gas emissions 0 - 3 years	Increased enrollment in utility assistance and efficie y programs New/enhanced organizational partnerships established to support this work

		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
	Heat Pump Installations: Expand heat pump installation programs to cover more households and locations.	King County, local jurisdictions, community- based organizations, local service providers, heat pump vendors & installers, utilities	X	Direct support for higher- risk communities Workforce development Lower greenhouse gas emissions 1 – 3 years	Number of heat pumps installed in low- income homes, multi- family buildings, and community-centered buildings
	Enhanced Cooling Centers: Provide wrap-around services at public cooling centers.	Local governments, King County	X	Direct support for higher- risk communities 0 – 1 year	Number and distribution of cooling centers with added activities Number and distribution of cooling centers with extended hours Facility attendance during heat events
:	Community-led Cooling Spaces: Expand cooling location options to include more community-trusted locations.	King County, local jurisdictions, community- based organizations	X	Direct support for higher- risk communities Building local capacity 1 – 3 years	Number of community-led cooling locations established Training materials developed to support help community facilities become cooling locations Facility attendance during heat events

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		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
2:	HELP PEOPLE STAY COOL & SAF	E OUTDOORS			
6	Drowning Prevention: Promote water safety and drowning prevention through swimming lessons, lifeguard training, and distribution of water safety equipment.	Non-profit , local governments, community- based organizations, King County	X	Direct support for higher- risk communities Increased public awareness Expanded recreation opportunities 0 – 1 year	Number of incomequalified esidents participating in swim lessons Number of life vests and swim safety information distributed Number and diversity of people participating in lifeguarded trainings
7	Cool Kits for Unhoused People: Distribute Cool Kits for unhoused people during heat events.	King County Regional Homelessness Authority, service providers	X	Direct support for higher- risk communities 0 – 1 year	Number and geographic distribution of Cool Kits shared New/enhanced organizational partnerships supporting Cool Kits delivery

		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
8	Occupational Heat Safety: Increase heat safety awareness and preparedness for workers who are more at-risk when it is hot.	King County, community- based organizations, local service providers, Washington Department of Labor & Industries	X	Direct support for higher- risk communities Increased public awareness 0 – 3 years	New/enhanced organizational partnerships involved in co-creating and distributing materials Number and geographic distribution of Cool Kits, occupational safety information shared
3:	COOL OUR NEIGHBORHOODS				
9	Private Property Tree Care: Develop and promote technical, educational, and financial assistan e for tree planting and maintenance to private property owners.	Local jurisdictions and King County	X	More equitable tree canopy coverage Air quality, water quality, and other ecosystem benefit Lower greenhouse gas emissions Reduces heat island effect 3+ years	Number and geographic distribution of trees planted in identified het islands Percentage of canopy cover gained in identified heat islands

		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
1	Maximize Tree Survival: Research, share, and promote best practices tree establishment to increase survival of newly planted trees.	Local jurisdictions and King County		More equitable tree canopy coverage Stronger regional coordination and alignment Lower greenhouse gas emissions Air quality, water quality, and other ecosystem benefit Reduces heat island effect 3+ years	Percentage of newly planted trees that survive past three years in identified he t islands Percentage of resources distributed and trees planted in identified he t islands Number of participants in technical trainings
1	1 King County Tree Code Toolkit: Develop and support application of a King County Tree Code Toolkit.	King County, local jurisdictions, and King Conservation District		More equitable tree canopy coverage Stronger regional coordination and alignment Reduces heat island effect 1 – 3 years	Availability of the toolkit through multilingual and multi-media translation and distribution events. Number of jurisdictions that use the toolkit to inform their tree code development process

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		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
12	Track Equitable Canopy Cover: Support local efforts to identify, track, and achieve tree canopy goals.	King County, local jurisdictions, and King Conservation District		More equitable tree canopy coverage Stronger regional coordination and alignment Reduces heat island effect 1 –3+ years	Urban tree canopy analyses completed by jurisdictions Increased collaboration across jurisdictions on tree canopy work Percentage of tree canopy cover gained in identified he t islands
13	Open Space Access: Protect, increase and maintain accessible open space, particularly in heat islands.	King County, local jurisdictions, and non- governmental organizations	X	More equitable access to green space Expanded recreation opportunities Improved air quality, water quality, and other ecosystem benefit Reduces heat island effect Workforce development 3+ years	Reduction in open space inequities in identified heat islands Number and distribution of depaving projects completed in identified heat islands Number of stormwater parks completed in identified he t islands

		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
4:	DESIGN FOR HEAT				
14	Cool Schools: Increase heat resilience of local schools and learning centers through a Cool Schools Initiative.	King County, local jurisdictions, school districts, and early learning facilities	X	Direct support for higher- risk communities Lower greenhouse gas emissions Increased public awareness Improved air quality, water quality, and other ecosystem benefit Reduces heat island effect 0 - 3+ years	Number and distribution of schools in identified heat islands engaged in the work Number and distribution of school staff t ainings developed and hosted Training evaluations Number of schools in identified he t islands with heat-related upgrades Lower indoor temperatures in rooms or buildings that have received upgrades

		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
15	Building and Development Codes: Reduce heat impacts through effective building and development codes and policies.	King County and local jurisdictions		Lower greenhouse gas emissions Reduces heat island effect Cooler, more energy effici t residences Stronger regional coordination and alignment 1 – 3+ years	Adoption of proposed codes to the Washington State Building Code For codes not approved by the state, number of codes adopted by local jurisdictions Number of local development codes and policies updated to include heat resilience
16	Heat Smart Parks and Playgrounds: Design and activate parks and playgrounds for heat.	King County, local jurisdictions, community-based organizations, neighborhood groups, private funders	X	Direct support for higher- risk communities Recreation benefit Stronger regional coordination and alignment Reduces heat island effect 0 – 3+ years	Number of agencies incorporating heat-smart best practices into capital planning programs and other decision processes Number of playgrounds built in accordance with heat smart guidance Number of parks that include heat safety activities or outreach during summer or heat events

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		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
5	INCREASE HEAT SAFETY AWARE	NESS			
17	Multilingual Communications: Develop and support distribution of inclusive, multilingual materials related to heat preparedness.	King County and local jurisdictions	X	Direct support for higher- risk communities Increased public awareness Building local capacity O – 1 year	Number of languages and media formats in which educational materials are available Number, diversity, and geographic reach of media outlets distributing translated messaging Number, diversity, and geographic reach of community-based organizations involved in co-creation and distribution of materials

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		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES
18	Heat Resilience Trainings: Create and administer trainings to help educate communities on heat safety and preparedness.	King County and community partners	X	Direct support for higher- risk communities Increased public awareness Building local capacity Workforce development 0 – 3 years	Number of educational training modules developed Number of languages in which training modules are available Number, diversity, and geographic reach of community-based organizations engaged in delivery of trainings Community partner feedback on ease and effectiveness of trainings

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		IMPLEMENTING PARTNERS	COMMUNITY PRIORITY	ACTION BENEFITS & TIMELINE FOR BENEFITS	POTENTIAL PERFORMANCE MEASURES		
6:	6: SUPPORT HEAT ACTION						
19	Partnerships for Implementation: Build partnerships and coordination around strategy implementation and funding.	King County, local jurisdictions, and local service providers	х	Stronger regional coordination and alignment	Number and tracking mechanism for finali ed performance measures		
				Building local capacity 0 – 3+ years	Number, diversity, and geographic reach of communities involved as partners		
					Individual and joint funding opportunities pursued to support strategy implementation		
					Data on utilization of web resources		
20	Support Community Solutions: Support implementation of community-determined solutions for heat.	King County, local governments, community- based organizations, service providers, philanthropy	Х	Direct support for higher- risk communities Building local capacity 1 – 3 years	Amount of funding available for community-identified heat mitigation activities through existing or new grant programs		
					Number, diversity, and geographic reach of communities receiving technical assistance and/or grant funding		

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encouraging intergenerational support in response to extreme heat (e.g., partnering with youth on wellness checks for seniors). These solutions could be supported via <u>Action 20: Support Community Solutions</u>.

- Leveraging workforce development to advance heat resilient action. To strengthen King County's priority areas around extreme heat, strategic alignment between the King County Green Jobs Strategy and Extreme Heat Mitigation Strategy should be explored. This could include addressing heat vulnerability through workforce development opportunities and partnerships such as:
 - o *Skilled Workforce Partnerships:* Leverage existing key workforce development initiatives under the Green Jobs Strategy to provide action implementation support and formalized partnerships with contractors to further HVAC installations and weatherization project to advance

 <u>Action 3: Heat Pump Installation.</u>
 - o Expanding Occupational Heat Mitigation Knowledge: In partnership with the JumpStart climate-workforce development initiative, support heat resilience and climate justice education for prospective work-based learning trainees. This could leverage Action 18: Heat Resilience Trainings.
 - o *Internal Capacity Building:* Through collaboration with the King County Climate and Workforce Development team, recommend relevant building efficiency certifications and trainings through the Green Skills Development Fund to advance county workforce skills in implementing heat resilient infrastructure.
- **Keeping pets healthy during extreme heat events.** Pet care was a concern in multiple community focus groups, and many residents without air conditioning did not feel comfortable leaving pets home alone to seek cooler locations outside their residence. Further attention should be given to helping pet owners keep their pets safe during heat events.
- Collecting temperature data through additional heat mapping efforts using low-cost sensors and engaging community members.
- **Promoting heat resilience in the healthcare industry.** Having a standardized method through which physicians can identify and code heat-related symptoms could improve data collection on heat and health impacts. Additionally, co-developing heat safety messaging with physicians can increase heat awareness from trusted medical sources.

Implementing this strategy will require ongoing community engagement, sustained partnerships across sectors, and coordination between multiple levels of government. Sustained partnerships between government entities and frontline community organizations will be particularly

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important to ensure continuous prioritization of frontline community needs in implementation and to build long-term community resilience to heat. Through this approach, we can collectively build a more heat resilient King County.

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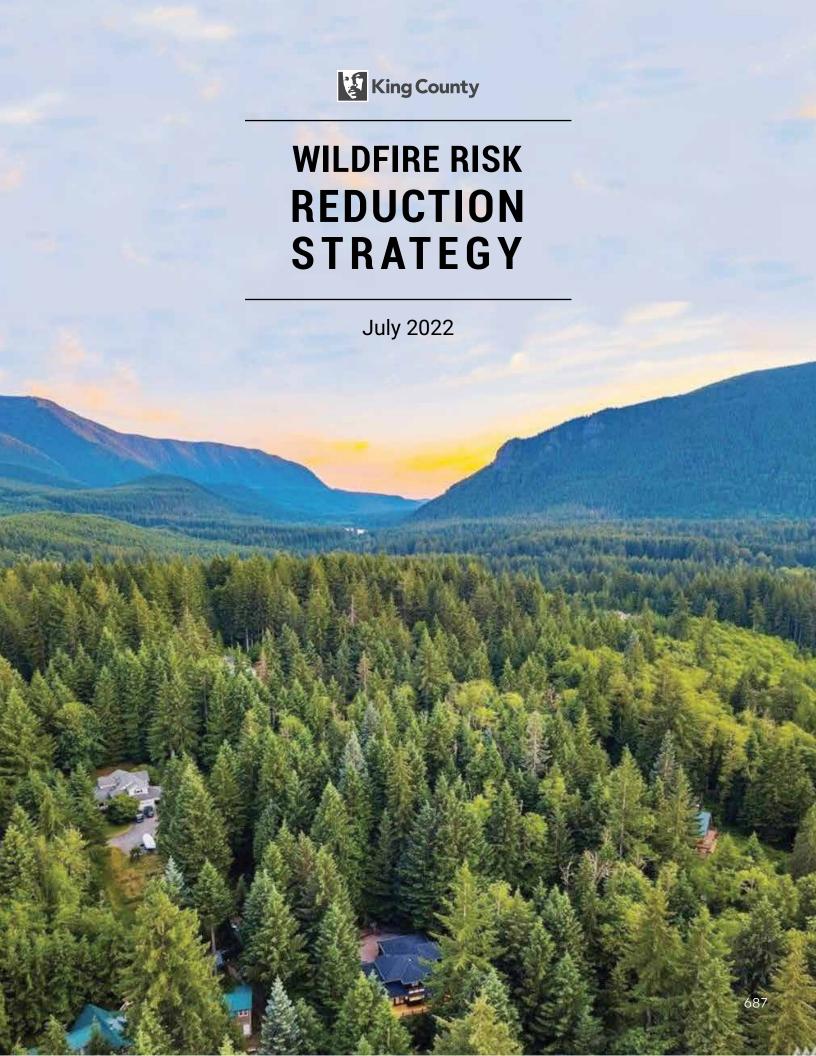
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KING COUNTY

WILDFIRE RISK REDUCTION STRATEGY

July 2022







Alternate formats available

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sc = Steering Committee

EXECUTIVE LETTER TO READERS

July 2022

King County is home to spectacular forest lands that provide important recreational, ecological, cultural, and economic benefits to King County residents. Under the right conditions, however, these same forests are also vulnerable to wildfire.

The increase in wildfires across the Pacific Northwest, including large wildfires near Portland and the smaller but impactful Graham fire in Pierce County in 2020, have heightened awareness that King County communities need to be better prepared for wildfire. Climate change makes this need even more urgent.

The King County Wildfire Risk Reduction Strategy is designed to improve coordination and provide a strategic approach to wildfire risk reduction. Co-developed with local, state, and Tribal organizations and jurisdictions, the strategy's three strategic pillars – increasing forest resilience, reducing wildfire risk in the wildland-urban interface, and strengthening emergency response – ensures that we are taking a comprehensive, integrated approach to wildfire preparedness.

No single agency is solely responsible for reducing wildfire risk in King County, so success will require strong coordination. Wildland-urban interface communities and residents, fire districts, conservation agencies, utilities, state, and federal agencies, private forestland owners, and others all have a role in implementing strategy actions that make our communities safer.

Our fire history shows that very large, fast-moving fires have occurred in western Washington. The potential for these types of fires, while still low in any given year, is expected to increase as we experience hotter, drier summers. While we cannot eliminate the risk of wildfire in King County, we can take the steps included in this strategy to reduce the potential for wildfire and to limit the impacts associated with these events when they occur.

Together, we can strengthen our region's ability to prepare for, respond to, and recover from wildfire hazards, better protecting the people, infrastructure, and forests of King County.

Dow Constantine

King County Executive

Dow Courterti

King County

Katherine Ross

Mayor, City of Snoqualmie

SHOQUALMIE

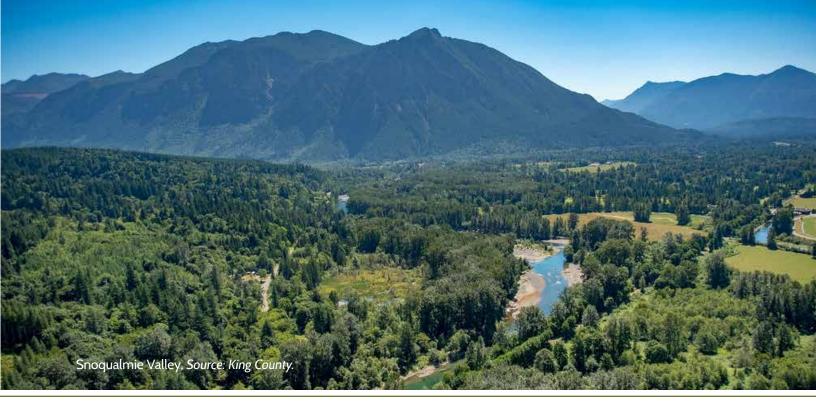
Erik Hicks

President, King County Fire Chiefs Association



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EXECUTIVE SUMMARY

Large wildfires¹ across the Pacific Northwest over the last decade, combined with increasing concern about the impacts of climate change on wildfire locally, have contributed to growing awareness that communities on both sides of the Washington Cascades need to be better prepared for wildfire. This is particularly true for communities in or adjacent to the wildland-urban interface (WUI) (Figure 1).

In 2021, King County convened representatives from public, private, and Tribal agencies and organizations to develop a strategic framework for cross-jurisdictional and cross-organizational work on wildfire risk reduction in King County. The effort sought to build from best practices being implemented locally and across the western United States while also accounting for important regional differences in wildfire potential, public awareness, and community readiness.

The King County Wildfire Risk Reduction Strategy includes 12 recommended actions that expand and accelerate wildfire risk reduction efforts in King County (Table 1). The strategy takes an integrated approach to wildfire preparedness, with a focus on increasing forest resilience to wildfire, reducing risks to communities and infrastructure in the WUI, and strengthening emergency response. Recommended actions include community-scale wildfire planning, increased public education and outreach, establishing baseline training and equipment standards for first responders, implementing a countywide "Ready-Set-Go" evacuation notification program, and supporting vegetation management practices appropriate to King County forests. Some of these actions are already underway to varying degrees in the County. In those cases, the strategy provides an opportunity to expand and enhance that work in ways that increase benefits to residents, communities, and ecosystems. In other cases, the actions are new areas of work that fill important gaps.

The goal of the King County Wildfire Risk Reduction Strategy is to prepare for and reduce wildfire risk in King County by:

- Increasing the resilience of King County forests to wildfire,
- Increasing wildfire preparedness, response, and recovery within the wildland-urban interface, and
- Responding quickly, effectively, and safely when wildfire occurs.

¹The term "wildfire" refers to an unplanned, unwanted fire burning in a natural area, including forests, grasslands, prairie, or brush. Wildfires can start from natural causes, such as lightning, but are most frequently caused by humans, either accidentally or intentionally. For the purposes of this strategy, "wildfire" includes smaller brush fires. Adapted from Federal Emergency Management Agency.

The strategy's approach and actions are intended to help address wildfire risk as it exists today and with climate change, particularly in those areas and communities where wildfire is most likely to pose a significant threat to human life or property. This includes a potential for large, fast-moving wildfires similar to those found in the historical fire record for western Washington. While large fires are rare, the consequences of this type of fire would be significant. An increase in smaller fires is also expected, particularly in or near areas with people. Suppression crews usually keep these fires small but those efforts can become more complicated when complex terrain and infrastructure create logistical challenges for firefighters.

Action implementation will require participation from a range of agencies and organizations, including King County government. Implementation will also require coordination with federal, state, and Tribal partners. A shared ownership approach is taken given that no single agency or program is responsible for the issue of wildfire preparedness in King County. In that sense, the strategy was written for King County as a community of communities rather than as a plan specifically for King County government.

The King County Wildfire Risk Reduction Strategy is considered a five-year plan (2022-2027) subject to review and update on five-year cycles as needed. Actions should be implemented by 2027, although some actions will be completed sooner and many actions will involve ongoing work and/or periodic updates after that date. King County will be the steward of the strategy, tracking implementation and working with stakeholders to evaluate the need for updates.

While no strategy can eliminate wildfire risk in the County, this strategy signals an ongoing commitment to collective action on this important issue. King County will work with partners to support and track progress on implementation of the strategy, ultimately helping to reduce overall risk and increase community and ecosystem resilience to wildfire.

PARTICIPATING ORGANIZATIONS

City of Duvall Maste

City of Enumclaw

City of Issaquah

City of Sammamish

City of Skykomish

City of Snoqualmie

Eastside Fire and Rescue

Hancock Forest Management

King Conservation District

King County

King County Fire Dist. 20

Kirkland Fire

Master Builders Association of King/Snohomish County

Northwest Natural Resource

Group

Puget Sound Energy

Puget Sound Regional Fire

Authority

Seattle City Light

Seattle Public Utilities

Snohomish County

Snoqualmie Tribe

South King County Fire Training

Consortium

Tulalip Tribes

University of Washington Climate Impacts Group

University of Washington School of Environmental and

Forest Sciences

Valley Regional Fire

Vashon Fire and Rescue

Washington State Dept. of

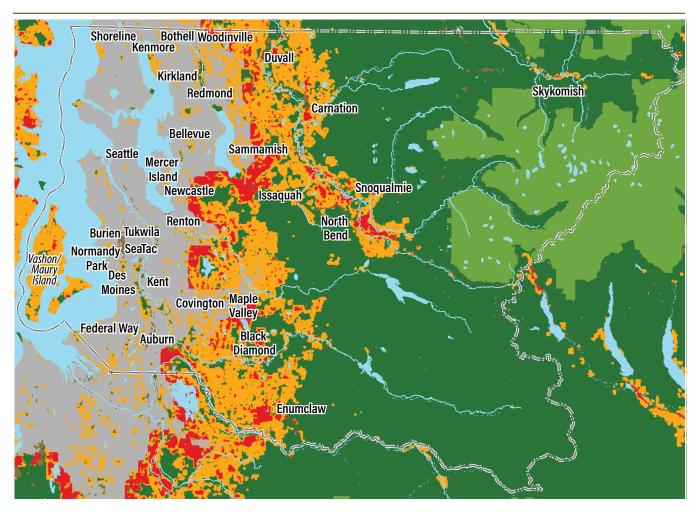
Natural Resources

Washington State University

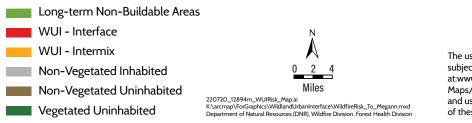
Extension

Also consulted: U.S. Forest

Service



King County Wildland-Urban Interface (WUI)



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Figure 1. King County Wildland-Urban Interface (WUI), as mapped by Washington State Dept. of Natural Resources. 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 that 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. Data source: Washington State Dept. of Natural Resources.

Table 1. Summary Table of Recommended Strategy Actions.

	PRIMARY IMPLEMENTERS	RELATED STRATEGIC PRIORITY		
ACTION	As recommended in the action. Does not include other implementing partners.	Forest Resilience	WUI	Emergency Response
Promote species and structural diversity within King County forests to improve wildfire resilience.	Forest landowners and managers	Х		
Develop post-fire response plans to support forest recovery and reduce near-term wildfire impacts on natural resources.	Public forest landowners and large private forest landowners ²	X		
3. Increase technical and financial support for small forest landowners for wildfire risk reduction.	King County, King Conservation District, WSU Extension Forestry	X	Х	
4. Develop community wildfire preparedness, response, and recovery plans.	WUI local governments, King County		Х	
5. Advance wildfire risk reduction through effective policies, plans, and codes.	WUI local governments, King County		Х	
6. Create King County-specific wildfire mitigation best management practices and expand household-level wildfire mitigation assistance.	King Conservation District, King County		X	
7. Increase monitoring and control of invasive species that increase wildfire risk in the wildland-urban interface.	Forest landowners and managers		X	
8. Implement the "Ready, Set, Go!" public education evacuation program in the wildland-urban interface.	King County		X	X
9. Implement countywide training standards for all levels of wildfire response.	Local fire departments			X
10. Establish partnerships and agreements to ensure timely and cost-effective access to wildfire firefighting resources.	Local fire departments, King County, Washington State Dept. of Natural Resources			
11. Implement a coordinated approach to public education and outreach on wildfire risk reduction in King County.	King County, King Conservation District	Х	X	X
12. Enhance and expand opportunities for shared learning and coordination related to wildfire risk reduction.	King County, natural resource management agencies, conservation agencies	Х	X	X

² Large is greater than 1,000 acres, as defined by the King County Rural Forest Commission (KCRFC 2022).



1. Introduction

Large wildfires³ across the Pacific Northwest over the last decade, combined with increasing concern about the impacts of climate change on wildfire locally, have contributed to growing awareness that communities on both sides of the Washington Cascades need to be better prepared for wildfire.

In 2021, King County convened representatives from wildland-urban interface (WUI) communities; fire departments; local, state, and Tribal natural resource agencies; conservation agencies; utilities; and academic institutions to develop a strategy for coordinated work on wildfire risk reduction in King County. The effort sought to build from best practices being implemented locally and across the western United States. At the same time, the effort recognized the need for an approach

The goal of the King County Wildfire Risk Reduction Strategy is to prepare for and reduce wildfire risk in King County by:

- Increasing the resilience of King County forests to wildfire,
- Increasing wildfire preparedness, response, and recovery within the wildland-urban interface, and
- Responding quickly, effectively, and safely when wildfire occurs.

to wildfire risk reduction in King County that accounts for important differences in wildfire potential, public awareness, and community readiness relative to other parts of the U.S. West.

The King County Wildfire Risk Reduction Strategy provides a first-ever strategic framework for cross-jurisdictional and cross-organizational work on wildfire risk reduction in King County. The strategy's approach and 12 recommended actions are organized around three strategic priorities: increasing forest resilience,⁴ reducing risks to communities and infrastructure in the WUI, and strengthening emergency response. This approach recognizes that coordinated work across these areas is necessary to reduce overall risk and increase community and ecosystem resilience to wildfire.

³ The term "wildfire" refers to an unplanned, unwanted fire burning in a natural area, including forests, grasslands, prairie, or brush. Wildfires can start from natural causes, such as lightning, but are most frequently caused by humans, either accidentally or intentionally. For the purposes of this strategy, "wildfire" includes smaller brush fires. Adapted from Federal Emergency Management Agency.

⁴ Forest resilience is defined as the ability of the forest to absorb and recover from disturbance in a way that retains "essentially the same function, structure, identity and processes" (Walker et al. 2004, as referenced in the <u>King County 30-Year Forest Plan</u>).



Successful implementation of the strategy's recommended actions will involve numerous organizations in leading or supporting roles. This reflects the fact that no single agency or program is responsible for wildfire preparedness in King County. For that reason, the strategy was not written specifically for King County government; it is a strategy written for King County as a community of governments, organizations, and other public and private sector partners that have a role in shaping wildfire resilience.

The King County Wildfire Risk Reduction Strategy is considered a five-year plan (2022-2027) subject to review and update as needed thereafter. The goal is for all actions to be implemented and/or in an ongoing status by 2027. Some actions can be completed well before 2027 while other actions will likely be phased in as part of ongoing forest management practices or policy update cycles, for example.

Planning for wildfire is a shared priority in King County's 2020-2025 Hazard Mitigation Plan, 2020 Strategic Climate Action Plan, and 30-Year Forest Plan. King County will be the steward of the strategy, tracking implementation and working with stakeholders to evaluate the need for updates. Actions from this strategy and any future updates should be integrated into county and local hazard mitigation plans, comprehensive plans, and other strategic planning documents like the County's Strategic Climate Action Plan as appropriate. Integration can ensure that strategy goals are met and help drive fiscal and staff resources to the work.

While wildfire smoke is a concern, the strategy does not include actions related to wildfire smoke. Planning for wildfire smoke involves a notably different set of questions, issues, and stakeholders relative to planning for wildfire. Public Health-Seattle & King County will be developing a wildfire smoke response plan focused on managing the impacts of wildfire smoke on health and community wellbeing as part of the King County 2020 Strategic Climate Action Plan.

1.1. Strategy Development

Initial input on wildfire preparedness concerns, gaps, and strategy outcomes was collected in early 2021 via interviews with more than 60 staff working inemergency management, emergency response, planning and zonin, natural resource management, outreach and education, and public utility service delivery. The interviews revealed a common set of wildfire preparedness concerns in King County, including:

- A lack of public awareness about wildfire potential in Western Washington;
- A lack of understanding of viable wildfire prevention measures for western Washington forests;
- A lack of community-scale wildfire planning and risk mitigation, including limited planning and capacity for community-scale evacuation;
- The need for more Firewise USA®5 support and other types of landowner assistance for implementing actions that reduce wildfire risk;
- The need for improvements in development codes and standards for the WUI;
- The need for additional wildland fire response training; and
- The need for more cross-collaboration between organizations and shared resources for planning (e.g., shared risk maps, best practices)

Following the interviews, three workgroups comprised of representatives from public, private, and Tribal agencies and organizations were convened to develop strategy goals and actions. The workgroups were organized around the effort's three strategic priorities: forest resilience, the WUI, and wildfire response (Figure 2).

PARTICIPATING ORGANIZATIONS

City of Duvall King/Snohomish County City of Enumclaw

City of Issaquah Group

City of Sammamish City of Skykomish

City of Snoqualmie

Eastside Fire and Rescue

Hancock Forest Management

King Conservation District

King County

King County Fire Dist. 20

Kirkland Fire

Master Builders Association of

Northwest Natural Resource

Puget Sound Energy

Puget Sound Regional Fire

Authority

Seattle City Light

Seattle Public Utilities

Snohomish County

Snoqualmie Tribe

South King County Fire Training

Consortium

Tulalip Tribes

University of Washington Climate Impacts Group

University of Washington School of Environmental and

Forest Sciences

Valley Regional Fire

Vashon Fire and Rescue

Washington State Dept. of

Natural Resources

Washington State University

Extension

Also consulted: U.S. Forest

Service

Also consulted: U.S. Forest Service

Firewise USA® is a nationally-recognized voluntary wildfire planning program administered by the National Fire Protection Association and co-sponsored by the USDA Forest Service and the National Association of State Foresters. Firewise USA® provides information and planning resources designed to help individual homeowners and neighborhoods reduce wildfire risks on their property.

Workgroups met over a series of meetings between July 2021 and May 2022. Workgroup members were selected based on subject matter expertise and/or affiliation with key partner organizations. Many workgroup members were also part of the initial interview process. The U.S. Forest Service was also consulted in this process.

Potential actions for the King County Wildfire Risk Reduction Strategy were identified through facilitated discussions with workgroup members, literature reviews (e.g., scientific papers, community wildfire plans), and review of locally relevant strategic planning documents, including the King County 30-Year Forest Plan and the Rural Forest Commission's Strategic Priorities for 2022 (KCRFC 2022). An initial collection of more than 60 actions was developed through this process. The Forest Resilience workgroup was also tasked with developing a set of science-informed consensus statements related to wildfire potential in western Washington to help ensure that workgroups were viewing wildfire potential and risk in a consistent manner.

Workgroup members participated in two rounds of action prioritization. The prioritization process was motivated by the desire to focus the strategy on a limited number of actions that meaningfully contribute to the strategy's overarching goal and represent the best next steps for wildfire preparedness given what we currently know about wildfire risk and preparedness needs in King County. The project team used the prioritization results for each workgroup to develop an initial set of draft actions that were later refined based on reviews by the Steering Committee and workgroup members.

Strategic leadership and input on the strategy's development and overall scope was provided by a Steering Committee consisting of representatives from each of the strategy's three workgroups. Steering Committee members helped identify workgroup members, advised on action development and prioritization, and provided guidance on the overall structure of the strategy, among other responsibilities.



Forest Resilience Workgroup: wildfire science (past, present, and future); vegetation/forest management approaches for wildfire risk reduction

WUI Workgroup: residential and communityscale planning; infrastructure and utility protection; development codes; hazard mitigation; urban forest management

Emergency Response Workgroup: wildfire response, training and equipment, interagency coordination, evacuation, emergency communications

Figure 2. Strategic Priorities and Workgroups. Workgroups for each of the strategy's three strategic priorities were convened to develop strategy actions. The general topics covered by each workgroup are also shown.



1.2. What is the Wildland-Urban Interface?

The King County Wildfire Risk Reduction Strategy is focused on reducing wildfire risk in the WUI and forests in King County. The WUI is the zone of transition between structures and other development and undeveloped land or vegetative fuels (U.S. Fire Administration 2021). In 2021, the Washington State Department of Natural Resources (WADNR) updated maps of the WUI throughout Washington State. The new maps significantly expanded the WUI in King County relative to previous mapping and includes two primary wildfire zones: interface and intermix (Figure 3). This strategy does not distinguish between the interface and intermix zones given that WUI codes do not treat them as separate and wildfire risk exists in both areas.

With the exception of the city of Clyde Hill, all incorporated cities and towns and all unincorporated Community Service Areas (CSAs) in King County have interface or intermix areas within their jurisdiction. Some WUI areas are relatively small and/or isolated, however, suggesting a limited wildfire risk. Cities, towns, and CSAs with more contiguous or larger WUI are primarily located located in east King County and Vashon-Maury Island (Table 1). While the focus of the strategy is on WUI communities and the forests in proximity to these areas, all communities with WUI areas are encouraged to take part in risk reduction activities where appropriate.

For the purposes of this strategy, "WUI communities" are defined as communities within or adjacent to intermix or interface areas as mapped by WADNR and where wildfire could pose a significant threat to human life or property.

The WADNR WUI map is a valuable tool for understanding *where* there is higher potential for damage to people and infrastructure in the event of a fire. The WUI map does not answer *who* and *what* is in the WUI, however. Understanding these details are important to understanding King County's risk from wildfire.

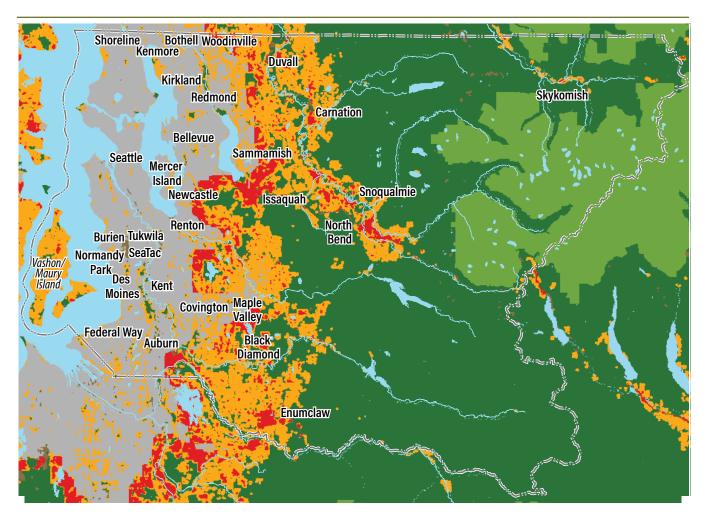
To start to answer these questions, an initial GIS analysis of the WUI was conducted using King County's Equity in Planning and Response Tool (EPRT). The tool supports users in analyzing the intersections of hazards, people, and infrastructure. The EPRT assists in building healthy and resilient communities across King County before a disaster occurs. The results of the initial EPRT analysis are summarized in Figure 4. A more detailed analysis of the WUI and associated risk factors at the county scale and within WUI communities is recommended as part of this strategy (see Action 4).

⁶ https://www.usfa.fema.gov/wui/what-is-the-wui.html



Table 2. King County Wildland-Urban Interface Communities, as Defined by the Strategy. This list does not include communities with small and/or relatively isolated WUI areas. *Source: King County Office of Emergency Management*

Auburn	Duvall	Maple Valley	Sammamish
Bellevue	Enumclaw	Newcastle	Skykomish
Black Diamond	Issaquah	North Bend	Snoqualmie
Carnation	Kirkland	Renton	Woodinville
CSA- Bear Creek/ Sammamish	CSA-Snoqualmie Valley/ NE King County	CSA- Four Creeks/ Tiger Mountain	CSA- Greater Maple Valley/Cedar River
CSA- SE King County	CSA-Vashon/ Maury Island		



King County Wildland-Urban Interface (WUI)

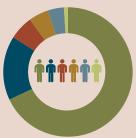


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Figure 3. King County Wildland-Urban Interface/Intermix Areas. The color-coded map categories are based on the proportion of vegetation cover to structures in an area. Interface areas are those in which development and structures are bordered by wildlands 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 that 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. Data source: Washington State Dept. of Natural Resources.

WHO LIVES IN THE WUI'

351,791 residents live in the WUI⁸



- **68%** White
- **16%** Asian
- **6%** Two or more races
- 5% Black
- 4% Other
- 1% American Indian and Alaska Native

54 languages spoken in the WUI



- English only
- Asian and Pacific Islander languages (Mandarin, Tagalog, Vietnamese, etc.)
- Other Indo-European languages
- Spanish
- Other
- Speaks English less than well⁹



5.7% of families and people have income in the past 12 months that was below the poverty level



16.5% of residents have a cognitive or physical disability or have difficulty living alone



\$122,312 is the median household income

WHAT'S IN THE WUI



12 incorporated cities and towns and 7 community service areas



21 King County neighborhoods have Firewise USA® Plans



49 fire stations, **32** medical centers, **8** police stations, and **2** call and dispatch centers for 911



111,546 single family homes, 5,178 mobile homes, 4,800 multi-family homes



76% homes are owner occupied, 24% are renter occupied



2,322 commercial and industrial buildings, **103** educational buildings, **21** assisted living facilities

Figure 4. Who and What is in the WUI?

⁷ 2020 ACS Data - US Census Bureau - census tract, inclusion into the analysis was determined if ~33 percent of total land cover was identified as interface, intermix, or forested.

⁸ <u>Critical Infrastructure</u> – KC GIS, <u>Parcel Use</u> – KC GIS

⁹ 2020 <u>Public Use Microdata Areas</u> (PUMAs) from U.S. census data was used, King County (Northeast), King County (Central), and King County (Southeast)

2. Understanding the Challenge: Wildfire Potential in Western Washington

King County's extensive forest lands are some of the most productive in the world and provide a wide range of economic and ecological benefits. Since time immemorial, these forests have supported Indigenous communities living in the Pacific Northwest, providing cultural resources and supporting habitat for salmon and other wildlife populations. Wildfire has also been used by Indigenous communities in western Washington to support culturally important species such as huckleberry.

King County forests regulate water quantity and quality, improve air quality, cool urban heat islands, improve mental health, support recreational opportunities, and provide renewable timber resources. King County forests also have the capacity to sequester and store carbon, an ecosystem service critical to reducing climate change. A 2010 assessment of ecosystem services in the Snoqualmie Basin estimated the economic benefit of natural systems in the basin at \$265 million to \$2.5 billion per year (Earth Economics 2010).

More than 60 percent (over 800,000 acres) of King County is forested (Figure 5). Forest types and canopy cover vary widely. Overall, 74 percent of King County's forested land is evergreen forest, 6 percent is deciduous forest, and 20 percent is mixed forest (dominated by both evergreen and deciduous tree species). Forest cover density increases as you move from urban/suburban areas into the foothills of the Cascade Mountains. Vashon and Maury Island also include extensive forest cover.

MANAGED FIRE FOR CULTURAL PRACTICES

Written by Andrew Gobin, The Tulalip Tribes

Well adapted to fire, huckleberry is one of the first plants to sprout after surface burns. Taking refuge in shallow and deep soils, rhizomes and root crowns can survive low intensity to moderately severe burns, depending on the level of understory coverage. For millennia Tribes used low intensity burns to manage huckleberry areas and maintain or create clearings to expand the opportunity for huckleberry habitat. These repeated low intensity burns clear out competing shrubs and trees leaving only the huckleberry, as the dense leaves are not very flammable and protect the bush. The remaining huckleberry and new sprouts then store the nutrients released from burned over soils.

Huckleberry teaches us an important lesson in balance and the need for fire on the land. Expansion of the plant relies on rhizomes and root crowns to produce vegetative clones. Under natural circumstance, it is extraordinarily rare for new huckleberry plants to



Controlled Burn for Huckleberry (*Image Source: The Tulalip Tribes*)



Huckleberry (Image Source: US Forest Service)

sprout from seed. The absence of fire on the land has led to an imbalance. Clearings have become overgrown and shaded out huckleberry stop producing fruit. Built up fuel loads have created conditions for high intensity, severe burns that kill huckleberry rhizomes and root crowns, which destroys the plant population. Natural recovery of huckleberry habitat after severe burns can take as long as 20 to 30 years, with fruit production returning one to five years after habitat recovery.

Fire is necessary for the health of huckleberry habitat. It is necessary for maintaining the meadows, for removing competing shrubs and trees, and for reducing the fuel load in order to minimize threat of severe intensity burns.

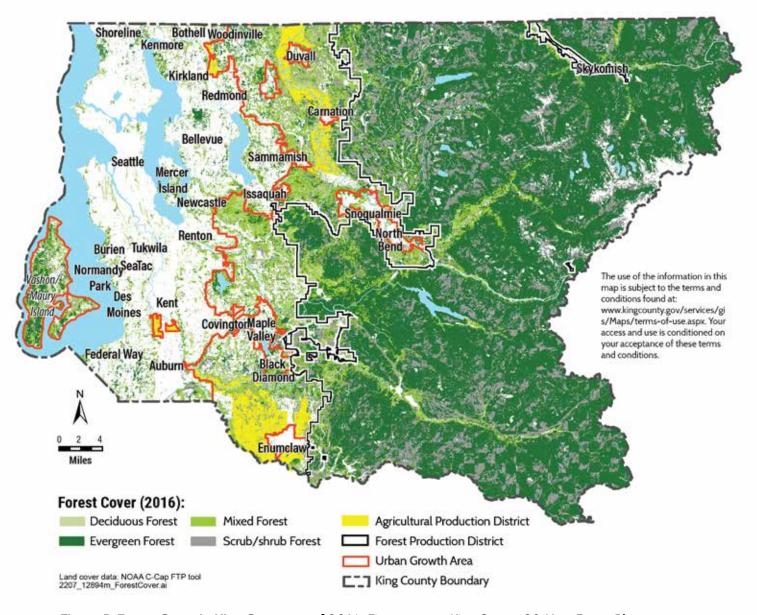


Figure 5. Forest Cover in King County as of 2016. Figure source: King County 30-Year Forest Plan

Forested lands in King County are managed for variety of purposes by a mix of public, private, and Tribal landowners and managers (Table 3; Figure 6). For example, the Cedar River Watershed is managed by Seattle Public Utilities as a municipal water source, Tomanamus Forest is managed by the Muckleshoot Federal Corporation for timber and cultural uses, and multiple forested parcels are managed by large industrial forestry companies for timber production. Analysis by the King County Rural Forest Commission estimates that timber production in King County generates approximately \$630 million in gross business income annually (KCRFC 2022).

Small and medium forest landowners are a relatively small but important fraction of forest landownership in King County. There are more than 20,000 small and medium forest landowners in King County. The majority of these owners (16,777) own less than five acres. Collectively, small and medium forest landowners account for almost half (46 percent) of privately held forest cover in King County and 13 percent of total forest cover in the County. These smaller parcels are a significant component of the WUI (Figure 7).



Table 3. Distribution of King County Forest Land Ownership. Source: King County Rural Forest Commission 2022 Strategic Priorities.

Category	Number of Owners	Forest Cover Acres (2016)*	% Total Forest Cover Acres	Total Forestland Acres***
Public Forestland		517,000	64%	566,000
Federal (USFS)		272,000	34%	301,000
State (DNR, Parks)		107,000	13%	127,000
City and County		135,000	17%	138,000
Private Forestland	20,931	262,000	32%	275,000
Large Tract (> 1,000 acres of forest)	13	126,000**	16%	163,000
Medium Tract (5–1,000 acres of forest)	4,131	68,000**	8%	75,000
Small Tract (< 5 acres of forest)	16,777	40,000**	5%	40,000
Tribal Forestland	3	32,000	4%	45,000
Total		811,000	100%	889,000

^{*} Forest cover calculated from the National Land Cover Database 2016 (NLCD 2016) data. This represents acreage of young to mature forest that supported readily detectable trees at the time of data collection.

^{**}Acreage for size classes of private forestland was produced from 2017 King County forest cover data, a higher resolution data source than the NLCD 2016. This resulted in some discrepancies in acreage totals.

^{***} Total forestland acres include recently harvested, replanted, and regenerating forests, as well as young to mature forest cover. To estimate this expanded acreage of forestland, scrub/shrub and grassland within the FPD were re-classified as forestland. Outside of the FPD, a visual assessment of NLCD 2016 data located recent harvested and regenerating forests, which were reclassified as forestland.

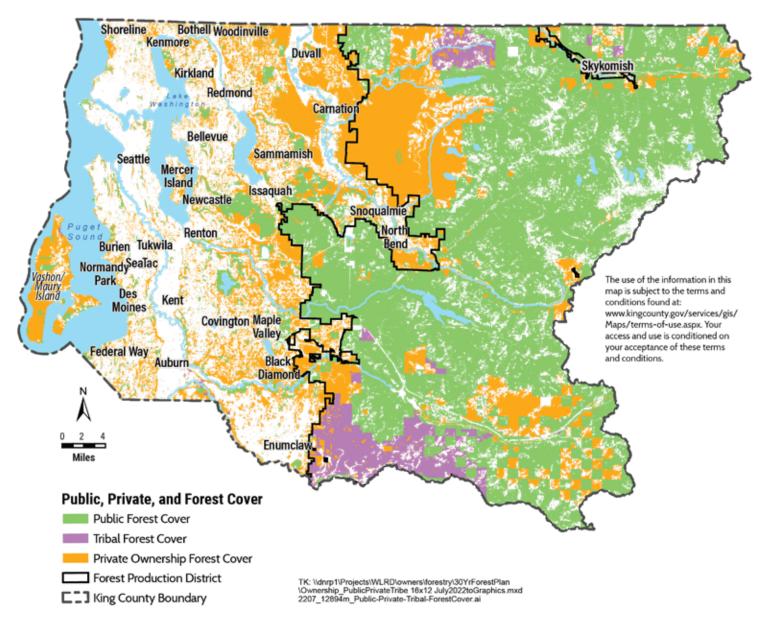


Figure 6. Public, Private, and Tribal Forest Cover in King County, as of March 2022. Figure source: King County GIS

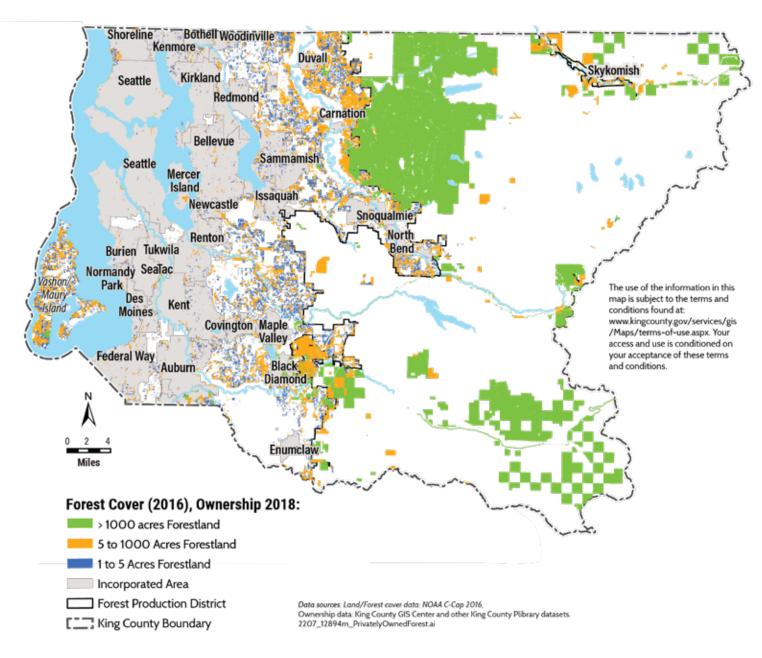


Figure 7. Privately-Owned Forest Cover in King County (Forest Cover 2016, Ownership 2018). Small and medium-sized private forest landowners are an important component of the wildland-urban interface. Figure source: King County Rural Forest Commission, 2022 Strategic Priorities

2.1. Wildfire Potential: Past, Present, and Future

Historical Wildfire Patterns

Wildfire activity in Washington State has strong regional differences due to differences in climate and the influence of development, forest management, and fire suppression on historical fire patterns.

Wildfire in western Washington historically occurred infrequently due to the region's cool, wet climate. Fire history shows that the average time between fires (i.e., the fire return interval) in western Washington is commonly greater than 150 years (Reilly et al. 2021), although some areas in the Puget Sound lowlands¹⁰ experienced more frequent, low severity fires.¹¹ These long, fire-free periods allowed for the development of older forests with complex, multi-layered canopies and dense understory vegetation. Under the right weather conditions, most notably dry conditions combined with strong east winds from eastern Washington, this natural abundance of fuels contributed to the development of large, high severity fires and to the development of large, high severity fires, like the 1902 Yacolt Fire in Washington and northwestern Oregon, exceeded one million acres.

WHAT ARE FUELS?

During a wildfire, all types of living and dead plant material can act as fuel, including grasses, shrubs, trees, leaves, and pine needles. In the right conditions, an abundance of fuels allows fires to burn hotter, larger, longer, and faster, making them more difficult and dangerous to manage. Homes and other buildings within the WUI can also act as a fuel for wildfire.¹²

A very different historical wildfire pattern is found in the warm and dry forests of eastern Washington. Prior to Euro-American colonial settlement, wildfires in eastern Washington forests typically occurred every five to 75 years, depending on elevation and forest type. Wildfires tended to be moderate in size (often less than 7,000 acres) and rarely killed larger diameter trees as fires quickly burned through the understory (Source name Year). The frequent fire activity maintained low density forests with large canopy openings and limited the accumulation of fuels in forest understories.

The adoption of active fire suppression practices in the early 20th century has significantly reshaped historical wildfire patterns in fire-prone regions like eastern Washington, greatly increasing wildfire risk. More than

a century of excluding, preventing, and quickly extinguishing fires in forests that would have otherwise experienced frequent, low intensity fires has led to an accumulation of excess fuels in those forests. The net result is forests with a much higher density of trees and fuels relative to what is considered natural and sustainable for those forests. In contrast, western Washington wildfire patterns and forest density have been largely unaffected by active fire suppression given the relative infrequency of large fires. Western Washington forests are highly productive and naturally dense with fuels. The net result is western Washington forests that still have similar potential for intense fires as they have historically (Figure 8).

These include Garry oak savannas in the Puget Sound lowlands and some forests in the rain-shadow of the Olympic Mountains.

¹¹ Fire severity refers to the effects of a wildfire on vegetation and soils. A low severity fire is a wildfire that results in less than 25 percent tree mortality and limited impact on forest soils. In contrast, a high severity fire is a wildfire that kills more than 75 percent of the trees and causes extensive mineral soil exposure. For more information on fire severity classifications and contributing factors, see Fire FAQs–What is fire severity? | OSU Extension Catalog | Oregon State University

¹² Adapted from https://www.doi.gov/wildlandfire/fuels

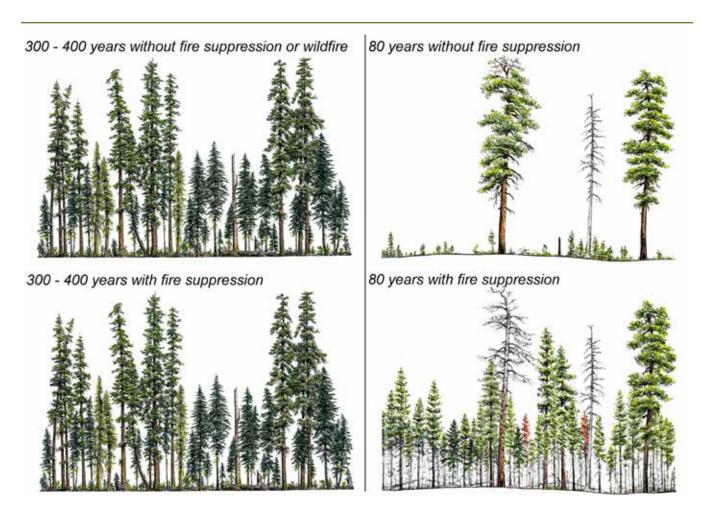


Figure 8. A Comparison of the Impacts of Fire Suppression on Major Washington Forest Types. In forests with long fire return intervals (left column), fire suppression has not affected forest density. In contrast, fire suppression has had a large impact on eastern Washington forests with shorter fire return intervals (right column). Figures not drawn to scale. Figure source: Halofsky et al. 2018, as adapted from Van Pelt 2007, 2008, Franklin et al. 2008. Used with author permission.

Current and Projected Wildfire Potential

Planning for wildfire in western Washington requires planning for two very different fire scenarios. The most common scenario in any given year in most ecosystem types is frequent, smaller fires, particularly in or near areas with people. These fires, which are most often caused by human activities, can occur throughout the fire season and in a variety of weather conditions. Suppression crews usually respond quickly and keep these fires small, although complex terrain and infrastructure can create logistical challenges for firefighters that complicate suppression. Widespread establishment of flammable invasive plants, such as Scotch broom, may also promote fire spread under these conditions.

The other planning scenario is the low but consequential probability for large, fast-moving wildfires similar to those found in the historical fire record for western Washington and northwestern Oregon. Two factors set the stage for the development of large, fast-moving wildfires in western Washington: 1) dry conditions, and 2) strong east wind events bringing warm, dry air from east of the Cascades. Very large fires in western Washington are currently most likely to occur from mid-August through September when fuels are typically driest. Recent examples of large wildfires driven by dry fuel and east wind events include the 2020 Labor Day Fires in Oregon and Washington and the 2017 Norse Peak fire near Mount Rainier National Park.

RECENT WILDFIRES IN WESTERN WASHINGTON AND OREGON

2017 Norse Peak Fire (Yakima and Pierce County, Washington)

On August 11, 2017, a lightning strike northeast of Mount Rainier National Park ignited a wildfire in the Norse Peak Wilderness area that burned almost 56,000 acres of forest, including ~25,000 acres (an

area half the size of the city of Seattle) on the west side of the Cascades near Crystal Mountain. The fire's spread into western Washington was aided by strong east winds. While the area burned on the west side was relatively small in comparison to historical fires for the region, the fire's location, size, and behavior was an early catalyst for discussions about planning for future wildfire risk in the central Puget Sound region. The fire has also created an opportunity to study how westside forests respond ecologically post-fire.¹³

2020 Labor Day Fires (western Oregon/Washington)

Over the 2020 Labor Day weekend, hot, dry conditions paired with strong east winds and a series of lightning and human ignitions resulted in more than 530,000 acres of forest burned in several fires across the western Cascades in southern



Norse Peak Fire, Sept 2017. Source: Marlon Batin, InciWeb

Washington and northwestern Oregon. These fires (including the Big Hollow, Riverside, Beachie Creek, and Lionshead fires) burned more area of the Oregon Cascades than the previous 36 years combined. The Labor Day fires led to several fatalities, placed over ten percent of Oregon residents under evacuation advisory, damaged thousands of structures, and contributed to hazardous air quality across the Northwest, showcasing the lasting human, ecological, and economic impacts westside fires can produce. (Reilly et al. 2022, Abatzoglou et al. 2021)

Sumner Grade Fire (Pierce County, Washington)

In September 2020, the Sumner Grade fire burned over 800 acres and damaged seven homes in Pierce County. While the fire was small relative to wildfires in other parts of Washington, the fire took four days to extinguish due to complex terrain and overextended resources.

Planning for wildfire also needs to account for the impacts of climate change on wildfire potential in western Washington. Higher seasonal temperatures, lower mountain snowpack, and drier summers are projected for western Washington with climate change (Mauger et al. 2015). These changes increase the dryness of fuels and lengthen the fire season, creating conditions more favorable for fire over a longer period of time (Figures 9 and 10). This includes an expanded window of time when conditions are more suitable for large fires. Changes in strong east wind events due to climate change are not fully understood at this time, but drier fuel conditions in summer could lead to more frequent fires even without changes in east wind events (Halofsky et al. 2018).

While best available science shows an increase in wildfire potential in western Washington due to climate change, quantifying the projected increase in terms of changes in frequency or total area burned is difficult relative to drier regions. For Washington State overall, total annual area burned is projected to double or triple by the 2080s compared to the last century (1916-2006) (Littell et al 2010). Rogers et al. (2011) found 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. The region's infrequent fire history and the unique climatic conditions required for large fires are notable challenges to reducing the range in projected changes.

¹⁵ For more on the Norse Peak Fire, watch "Wildfires west of the Cascade mountains: Rare, but large and severe" (YouTube)

Annual Days of "Very High" Fire Danger, Higher Emissions (RCP 8.5)

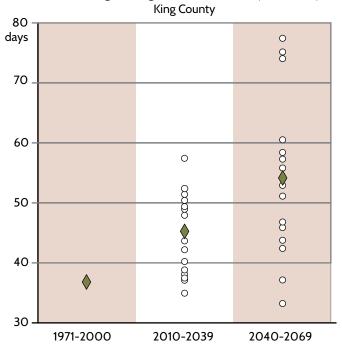


Figure 9. Projected Increases in "Very High" Fire Danger Days in King County. King County is projected to have 54 "very high" fire danger days, on average, by 2040-2069 under a high greenhouse gas emission scenario. This is an increase of 18 days (range: +32 to +78 days) relative to the average for 1971-2000. "Very high" fire danger days are defined as days when fires can spread rapidly and quickly increase in intensity. Small fires can quickly become large fires and exhibit extreme fire intensity during "very high" fire danger days. Averages and ranges are based on the results of 20 climate change models. Figure source: Krosby et al. 2018.

Average Model Values

O Individual Model Values

Annual Days of "Extreme" Fire Danger, Higher Emissions (RCP 8.5)

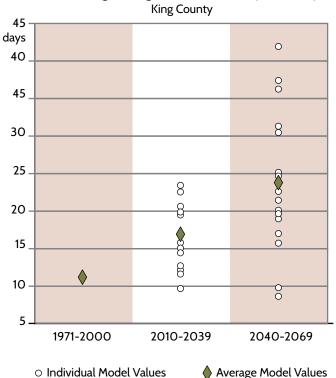


Figure 10. Projected Increases in "Extreme" Fire Danger Days in King County. King County is projected to have 24 "extreme" fire danger days, on average, by 2040-2069 under a high greenhouse gas emission scenario. This is an increase of 13 days (range: +9 to +42 days) relative to the average for 1971-2000. "Extreme" fire danger days are defined as days when all fires are potentially serious. Small fires can become big fires much faster than at the "very high" level. Averages and ranges are based on the results of 20 climate change models. Figure source: Krosby et al. 2018.



Population growth and development in the WUI are also important factors affecting current and projected wildfire potential in western Washington. According to the Washington State Dept. of Natural Resources, about 85% of wildfires in Washington State are started by people. The central Puget Sound region is projected to grow by as much as 1.8 million people by 2050 (PSRC 2020), increasing the likelihood of more ignitions. Fire suppression efforts may also become more complicated with increased development in the WUI.

As conditions become more favorable for fire in western Washington, the likelihood of small fires escaping containment increases, particularly during strong east wind events and dry conditions. Staying connected to western Washington wildfire research will be important for ensuring that county wildfire risk reduction actions and policies stay current with best available science.

2.2. Considerations for Managing Wildfire Risk in Western Washington

Options for managing wildfire risk in western Washington forests include many of the same approaches used in more fire-prone parts of the western United States. However, some options commonly used in more fire-prone forests may not be as effective or have unintended ecological consequences if implemented at a large scale in western Washington. Understanding these limits and taking steps to apply the appropriate tools in the appropriate places will help ensure meaningful reductions in wildfire risk.

Forest thinning, prescribed burns, and mechanically removing fuels are some of the most commonly used tactics across the western United States for reducing forest density and fuel amounts. Use of these practices over large areas or in undeveloped areas is not feasible or appropriate in western Washington, however. Forest thinning treatments and/or prescribed burning at broad scales (i.e., across large parts of western Washington forests) would fundamentally alter the dense and complex structure of westside forests and affect important ecological functions. The high growth rates of vegetation in westside forests would also lead to rapid fuel recovery, making the potential efficacy of such approaches short-lived.

While large-scale fuels reduction treatments are not practical, selective thinning and other forms of active fuels management at finer scales can be an effective way to protect high-value resources. Selective thinning to reduce fuels around critical infrastructure and homes can reduce the potential for damage, especially from small wildfire events, and aid fire suppression operations. Selective thinning can also be used to promote species diversity and restore forest health in degraded locations, helping to increase wildfire resilience while also creating desirable conditions for habitat and carbon sequestration (Figure 10). Finally, efforts to remove or control the spread of invasive plant species, some of which are particularly flammable (e.g., Scotch broom), can reduce wildfire potential and promote overall forest health.

¹⁴ See <u>Investigations | WA - DNR</u>. See also Wildfire At-a-Glance: A quick Look at DNR's Wildfire Program



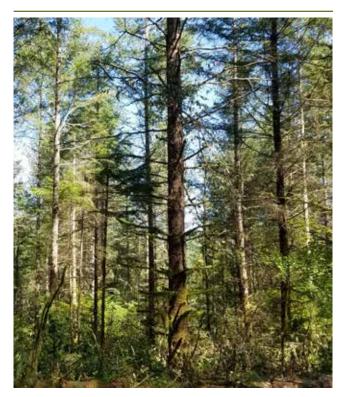


Figure 11. Ravensdale Retreat Natural Area Before (Left) and After (Right) Selective Thinning for Forest Restoration. Thinning for ecological restoration can also benefit wildfire risk reduction by helping forests absorb and recover from disturbance more quickly. *Photo source: King County DNRP*

Unfortunately, no amount of property or vegetation management can completely eliminate wildfire risk, particularly in the case of large wind-driven wildfire events. Stopping fires, where possible, with safe and effective wildfire suppression will remain a vital part of managing wildfire risk but response capabilities may be limited in the case of a large, wind-driven fire due to scarcity of wildland suppression resources or extreme fire behavior. For example, the 1902 Yacolt Burn traveled 36 miles in 30 hours, burning more than 200,000 acres in the process. The 2017 Eagle Creek wildfire managed to jump the Columbia River from Oregon to Washington via embers carried by winds and convective heat generated by the wildfire. In King County, embers from fire events have been carried a mile or more by winds.

The potential for large fires to overwhelm fuels management in western Washington forests underscores the importance of looking for ways to reduce wildfire risk to communities and infrastructure. In recent years, the number of organizations engaged in this work has grown in King County. Many of the actions in this strategy build from and complement existing wildfire risk reduction work by those organizations, including those listed here. Continued coordination and partnership with these efforts, as well as wildfire risk reduction efforts by organizations not listed here (e.g. local governments, tribal governments, and other fire departments), is an important aspect of the work called for in this strategy.

King Conservation District (KCD). KCD provides a range of services to help homeowners and communities prepare for wildfire. KCD provides on-site wildfire risk assessments for individual homes, supports development of community wildfire plans, and offers technical assistance for wildfire mitigation projects such as home hardening, wildfire resilient landscaping, and ladder fuels management. KCD also helps small forest landowners and communities actively manage forest stands to promote forest health, enhance wildlife habitat, and reduce storm water runoff.



Eastside Fire and Rescue (EF&R). Beyond urban and wildland fire suppression, EF&R has expanded its Emergency Management division to include a fulltime employee who will work with EF&R's partners to create community wildfire protection plans, conduct wildfire risk assessments, and lead a whole-community outreach campaign aimed to educate E&FR's service area residents on wildfire mitigation and prevention tactics. During wildfire season, EF&R participates in a weekly wildland regional planning and coordination calls; establishes weekly staffing assignments for state, regional, and inner agency extended operational incidents; and is prepared to preposition resources and increase staffing during red flag fire weather.

King County Department of Natural Resources Forestry Program. The King County Forestry Program works with forest landowners to enhance forest health on King County-owned and private, non-industrial forestland; enhance economic opportunities from forest management; and reduce risk from wildfire. Much of this work is conducted in partnership with King Conservation District and Washington State University Extension Forestry. Wildfire-related services include free technical assistance and neighborhood-based workshops focused on identifying and acting on wildfire risks, community wildfire planning support, and working with forest landowners to develop and implement forest stewardship plans that account for climate change and wildfire risk. In 2021, the Forestry Program released the King County 30-Year Forest Plan. Wildfire-related actions from the 30-Year Forest Plan have been incorporated into this strategy to help to help ensure strategic alignment.



King County Office of Emergency Management (KCOEM). KCOEM provides disaster preparedness and response information, training, and services for King County residents and communities. KCOEM's hazard mitigation program works with local jurisdictions to reduce wildfire impacts and connect communities to Federal grant opportunities for hazard mitigation. KCOEM also manages Alert King County, an emergency notification tool used if evacuation is needed due to a fire. During a large wildfire event, KCOEM would activate the Emergency Operation Center to coordinate responding agencies. Additionally, KCOEM would launch public alerts such as Reverse 9-1-1 and a Wireless Emergency Alert. After a wildfire, KCOEM supports recovery by providing damage assessments to receive federal aid.

King County Rural Forest Commission (KCRFC). The KCRFC is a 13-member advisory board consisting of diverse rural forestry interests that advises King County on policies and programs affecting rural forests and forest landowners in King County. In 2022, the KCRFC provided a comprehensive set of strategic recommendations and actions to the King County Executive and Council focused on ensuring healthy and resilient forests. This included several actions related to wildfire risk reduction, which were incorporated into this strategy to help ensure strategic alignment.

Seattle City Light (SCL). SCL provides electricity for the City of Seattle and several surrounding municipalities via seven hydroelectric projects throughout Washington State, including the Cedar Falls and Tolt projects in east King County. SCL seeks to be a leader in utility fire preparedness/mitigation and is presently developing a comprehensive Wildfire Risk Reduction Strategy that will be completed in 2022. The strategy will focus on stakeholder collaboration, a fire risk/readiness assessment and event response protocols, and will incorporate and complement existing wildfire risk mitigation efforts ranging from vegetation management, public education through the Washington Fire Adapted Communities Learning Network¹⁵, and training crews in fire-suppression/prevention and response.

Seattle Public Utilities (SPU). SPU owns and manages 100,000 acres of forestland between the Cedar and South Fork Tolt watersheds, some of which abut residential areas and most of which are surrounded by forests open to recreation. SPU prevents human-caused fires in the municipal watersheds by controlling access and activities within watershed boundaries. SPU also maintains initial attack capabilities to suppress fires that occur in the watersheds with the City's wildland fire team and has active agreements with WADNR to support fire-fighting efforts when needed. SPU is developing a Wildfire Risk Assessment to analyze and prepare for the risk of wildfire in the watersheds. The assessment, scheduled for completion by 2025, will address maintaining defensible space around critical assets and increasing preparedness for post-fire response. The assessment will also help SPU understand and prepare for the risk of a large wildfire to the municipal water supply and other high-value assets.

¹⁵ The Washington Fires Adapted Communities Learning Network works with individuals and organizations to connect, learn, and prepare communities for wildfire.

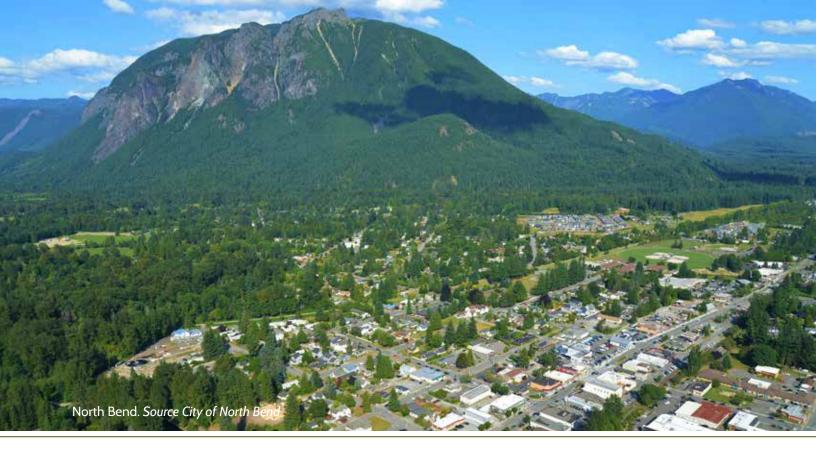


Washington State Department of Natural Resources (WADNR). WADNR manages more than 2 million acres of forested state trust lands for a range of beneficial uses, including 99,000 acres in King County. WADNR also plays a major role in wildfire prevention and response, and supports forest stewardship planning by small forest landowners via the agency's Small Forest Landowner Assistance program. WADNR manages the State Wildland Fire Protection 10-Year Strategic Plan; works collaboratively to help implement the National Fire Plan through Community Wildfire Protection Plans and community assistance grants; and convenes the Wildland Fire Advisory Committee, which guides how the state can most effectively respond to future wildfires. WADNR's Fire Prevention and Fuel Management Mapping System provides data for community wildfire protection, wildland urban interface, and Fire Communities planning.

Washington State University (WSU) Extension. WSU Extension provides research-based public education classes, publications, and online resources for forest landowners and the general public that support a variety of objectives, including forest health, timber production, and wildfire risk reduction. Specialized services include non-commercial thinning/forest restoration, webinars on wildfire mitigation and planning, and ondemand, self-paced training modules on forest health and wildfire risk reduction.

U.S. Forest Service (USFS). The Mount Baker-Snoqualmie National Forest lies on the west slope of the Cascade Mountains and extends from Mount Rainier National Park to the Canadian Border, including 365,826 acres within King County. The USFS hosts up to six wildland fire engines and two 20-person hand crews. During fire season, the USFS manages initial attack response capabilities and fire prevention efforts based on conditions, forecasts, and resource availability. Forest fire managers regularly coordinate local response capabilities and prevention efforts with cooperating neighbor agencies. Because of the extreme risk to firefighters in responding to fires in remote or hazardous terrain, a strategic risk-based response is considered for each fire, appropriate to specific hazards, threats, and opportunities. The USFS also supports development and implementation of Community Wildfire Prevention Plans.

¹⁶ As reported in the King County Rural Forest Commission's 2022 Strategic Priorities.



3. Meeting the Challenge: Wildfire Strategy Actions

How This Section is Organized

The Wildfire Risk Reduction Strategy includes 12 recommended actions that will help King County prepare for and reduce wildfire risk by: increasing the resilience of King County forests to wildfire; increasing wildfire preparedness, response, and recovery within the wildland-urban interface; and responding quickly, effectively, and safely when wildfire occurs (Table 4).

Actions are grouped in the following pages by each of the strategic priorities listed above. Two of the 12 actions are considered cross-cutting actions that benefit wildfire risk reduction more broadly. Each action includes the following information:

- Action description: Briefly describes why the recommended action is needed, what the action involves, who the action is primarily directed to, and what action will accomplish.
- Implementation partners: Identifies organizations or groups that are considered important to
 implementing the work and achieving the intended outcomes. Implementation partners may include
 other organizations not listed in this field. Identification as an implementation partner does not commit
 an agency to the listed action.
- Implementation feasibility: A relative scale (easy, moderate, hard) indicating how quickly the action can be implemented. Factors that can influence feasibility include the cost of implementation, the degree to which organizations are already engaged in the work or similar activities, and the absence or presence of political, legal, technical, or organizational barriers.
- Implementation target: Identifies the goal, in terms of timing, for completing the action. Timeframes will vary with each action. The goal for all actions to be implemented and/or in an ongoing status is 2027.
- Success indicators: Identifies potential indicators of success that could be used for monitoring implementation progress and effectiveness over time. Additional or alternate measures may also be appropriate.

Table 4. Wildfire Strategy Actions, Primary Implementers, and Related Strategic Priorities.

	PRIMARY IMPLEMENTERS RELATED STRATEGIC PRIORI		DDIODITY	
ACTION	As recommended in the action. Does not include other implementing partners.	Forest Resilience	WUI	Emergency Response
Promote species and structural diversity within King County forests to improve wildfire resilience.	Forest landowners and managers	X		
2. Develop post-fire response plans to support forest recovery and reduce near-term wildfire impacts on natural resources.	Public forest landowners and large private forest landowners ¹⁷	X		
Increase technical and financial support for small forest landowners for wildfire risk reduction.	King County, King Conservation District, WSU Extension Forestry	Х	X	
4. Develop community wildfire preparedness, response, and recovery plans.	WUI local governments, King County		X	
5. Advance wildfire risk reduction through effective policies, plans, and codes.	WUI local governments, King County		X	
6. Create King County-specific wildfire mitigation best management practices and expand household-level wildfire mitigation assistance.	King Conservation District, King County		X	
7. Increase monitoring and control of invasive species that increase wildfire risk in the wildland-urban interface.	Forest landowners and managers		X	
8. Implement the "Ready, Set, Go!" public education evacuation program in the wildland-urban interface.	King County		Х	X
9. Implement countywide training standards for all levels of wildfire response.	Local fire departments			Х
10. Establish partnerships and agreements to ensure timely and cost-effective access to wildfire firefighting resources.	Local fire departments, King County, Washington State Dept. of Natural Resources			
11. Implement a coordinated approach to public education and outreach on wildfire risk reduction in King County.	King County, King Conservation District	X	X	Х
12. Enhance and expand opportunities for shared learning and coordination related to wildfire risk reduction.	King County, natural resource management agencies, conservation agencies	Х	X	Х

 $[\]overline{\ }^{17}$ Large is greater than 1,000 acres, as defined by the King County Rural Forest Commission (KCRFC 2022).

FOREST RESILIENCE ACTIONS

Strategic Priority: Increase the resilience of King County forests to wildfire

1. Promote species and structural diversity within King County forests to improve wildfire resilience.

ACTION DESCRIPTION: Forests with a diversity of tree species (conifer, deciduous, mixed-species) and development stages (young, mid-age, mature/old-growth) are more resilient to disturbances such as wildfire and have greater capacity to maintain and recover ecological functions following disturbance. Much of King County's forested landscape currently lacks structural diversity, however. King County has an overabundance of second-growth forests that are uniform in tree height, tree diameter, and species composition. Conversely, younger forests (pre-canopy closure) and older forests (greater than 120 years old) are underrepresented due to a legacy of past and current management.

This action calls for King County forest landowners and managers to promote species and structural diversity within forest stands and across landscapes where not in conflict with other management objectives. Species and structural diversity may help limit the spread of wildfire, insects, and disease, and promote a diversity of responses following wildfire. Promoting species and structural diversity also provides important ecological benefits such as habitat, water and nutrient cycling, and carbon sequestration. This diversity and the associated benefits will become increasingly important as warmer and drier conditions associated with climate change increase stress on forests.

Recommended management practices related to this action include:

- Managing forests to include a broad range of native tree species, with a variety of ecological adaptations, including adaptation to wildfire and drought.
- Promoting or maintaining deciduous tree species within stands and as patches across landscapes, which can reduce flammability and often respond by sprouting after fire.
- Promoting or adding tree species that are resistant to low intensity fire, such as Douglas-fir and western
 white pine, where appropriate.
- Planting trees using local seed sources and seed sourced from zones with climates similar to future climate at the planting site¹⁸ Movement of tree species and seed sources within or beyond their current ranges should be monitored and based on available management trials.
- Managing for a diversity of tree species and stand development stages across the forested landscape.
- Retaining larger trees that are more fire resistant, provide important habitat, and provide locallyadapted seed sources for post-fire regeneration (if they survive the wildfire event). Larger trees can be retained by protecting them to allow continued growth or, in some cases, by reducing the density of surrounding trees to encourage more growth.

IMPLEMENTATION PARTNERS: Public forest landowners and managers, including King County Dept. of Natural Resources, Seattle Public Utilities, Washington State Dept. of Natural Resources, U.S. Forest Service; private forest landowners; Tribes; conservation agency partners (King Conservation District, Washington State University Extension Forestry)

¹⁸ Climate-informed seed source selection can be guided by tools such as the Seedlot Selection Tool (https://seedlotselectiontool.org/sst/) and focus on regionally native tree species. See also St. Clair et al. 2022

IMPLEMENTATION FEASIBILITY: *Hard*. Effective implementation of this action will require working with a range of public, private, and Tribal forest landowners and managers, adding complexity to this work. Additionally, while it will be possible to accelerate this work in some areas via forest thinning for restoration, the time-horizon for changes is long and many inaccessible areas simply need time to grow into more disturbance-resilient and complex forests. Finally, forest managers have limited experience with adapting forests to a changing climate.

IMPLEMENTATION TARGET: Ongoing, via integration into current forest management practices.

WHAT DOES SUCCESS FOR THIS ACTION LOOK LIKE?

- The diversity of native tree species in forests with important ecological and cultural functions have been maintained or increased.
- Forests have multiple co-dominant tree species in the overstory and understory; include deciduous species with a range of drought tolerances; and have early- and late-seral species across the forested landscape.
- Forests are maintaining the high productivity characteristics of west-side forests. This productivity supports regulation of water and nutrient cycles, carbon storage, and habitat, and is important for resilience.
- A variety of forest types are well-distributed across the landscape, including a reduction in stands/ forests that are uniform in age, tree diameter, and species composition (either through thinning or time).

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

ACTION DESCRIPTION: While there are many ecological benefits to wildfire in the long-term, wildfire can also create near-term post-fire challenges on the landscape that may need to be managed depending on the location, extent, and severity of the fire. Challenges can include an increased potential for landslides, flash floods, and debris flows; increased erosion and sediment loading in rivers, lakes, and streams; and spread of invasive species into areas disturbed by wildfire. These impacts can affect natural resources and physical infrastructure within the immediate area of the fire as well as areas further downstream.

This action calls for public and large private forest landowners¹⁹ to develop post-fire response strategies to facilitate forest recovery, including promotion of species and structural diversity as described in Action 1, and reduce near-term wildfire impacts on natural resources, assets, and communities. Post-fire response plans should include actions that:

- Minimize impacts on public safety, assets, and property;
- Minimize erosion of soils and sedimentation into streams:
- Minimize invasion of sites with non-native invasive species;
- Support site assessment, planning, and follow-up monitoring;
- Restore native vegetation and soil where appropriate;
- · Adapt species composition to meet long-term objectives;
- Facilitate natural processes such as succession, soil development, and ecosystem productivity;

¹⁹ Large is greater than 1,000 acres, as defined by the King County Rural Forest Commission (KCRFC 2022).

- Plan for seed availability for revegetation and erosion control material prior to fire impacts;
- Accelerate forest development if desired, or promote early succession conditions for habitat and cultural reasons, if desired;
- Implement Firewise USA® or related wildfire mitigation principles where appropriate; and
- Develop or strengthen collaborative relationships and staff expertise for post-fire recovery.

Once developed, post-fire response plans should be updated periodically to account for changes that may affect plan details. Planning by smaller private forest landowners should be supported where feasible and/or considered as part of future updates.

IMPLEMENTATION PARTNERS: Public forest landowners and managers, including King County Dept. of Natural Resources and Parks, Seattle Public Utilities, Washington State Dept. of Natural Resources, U.S. Forest Service; Tribes; large private forest landowners

IMPLEMENTATION FEASIBILITY: Hard. Supporting resources, access to technical support, and time required to complete plans are uncertain. Action would benefit from planning guidance and/or templates to support plan development. Given that fires may affect multiple landowners, this action may require working with public and private landowners to develop plans. Different landowners may select to implement fewer than the suggestion actions.

IMPLEMENTATION TARGET(S): Plans completed or in development by 2027; plans updated periodically after initial plan developed.

WHAT DOES SUCCESS FOR THIS ACTION LOOK LIKE?

- Post-fire response plans have been developed by relevant forest landowners.
- Collaborative relationships are developed before a wildfire incident.
- Plans for procurement of erosion control material and seeds for revegetation are in place prior to a wildfire incident.
- Post-fire response includes a coordinated process for burned area assessment and identifying appropriate mitigation actions. Response actions account for site-specific, long-term management objectives, including forest resilience and climate adaptation.
- Minimal impacts on public safety, assets, and natural resources occur after a fire.
- Site-appropriate vegetation that mitigates wildfire impacts and meets long-term management objectives is re-established.

3. Increase technical and financial support for small forest landowners for wildfire risk reduction.

ACTION DESCRIPTION: Over 30 percent of the 890,000 acres of forestland in King County is in private ownership. Of that total, approximately 60 percent of the privately-owned forestland is held by 13 relatively large (greater than 1,000 acres) forest landowners and the remaining 40 percent is held by nearly 21,000 different owners. These smaller-acreage forest landowners may lack the technical and financial support needed to develop and implement recommended strategies to enhance forest health and reduce wildfire risk.

To help address that need, King County, King Conservation District, and Washington State University (WSU) Extension Forestry regularly collaborate on group and individual education activities for private forest landowners and WUI communities. This includes training to develop forest stewardship plans that directly

address forest resilience under a changing climate and how to enhance resilience to wildfire. All three collaborators are experiencing a growing gap between resources for education and training and the increasing demand for those services, however. Additionally, there is significant need for enhanced access to cost-share programs that enable landowners to implement actions identified in forest stewardship plans.

King County will work with King Conservation District and WSU Extension Forestry to expand the suite of workshops and field training available to small forest landowners and ensure that climate- and wildfire-related topics are thoroughly covered in those activities. Partners will encourage landowners to carefully consider all aspects of wildfire response, including preparedness (e.g., management for forest health and resilience), response (e.g., evacuation routes) and recovery (e.g., tree salvage and replanting) in the development of forest stewardship plans.

King County will also work with partners to secure additional staffing and financial resources to support forest landowner implementation of forest stewardship plans. The goal is to increase total acres treated for forest health and wildfire resilience by ensuring that all forest landowners have relatively easy and timely access to education, training, and funding opportunities to develop and implement effective forest stewardship plans.

IMPLEMENTATION PARTNERS: King County Dept. of Natural Resources, King Conservation District, WSU Extension Forestry, Washington State Dept. of Natural Resources, small forest landowners, forestry consultants, forest management contractors, USDA Natural Resources Conservation Service

IMPLEMENTATION FEASIBILITY: *Moderate.* Programming and framework for technical services delivery are already in place but unable to keep pace with increasing demand. Additional staff and financial resources are needed by partner agencies (King County, WSU, King Conservation District) to fully meet current and projected demand, including demand for implementation resources and technical support.

IMPLEMENTATION TARGET: 2027, with ongoing sustained support after that date

- All small forest landowners are aware of wildfire/forest health Best Management Practices (BMPs).
- At least a doubling in available forest health/wildfire preparedness funding for implementing wildfire BMP projects.
- At least a doubling in number of wildfire mitigation projects implemented by small forest landowners.
- At least a doubling in acres treated for forest health and wildfire resilience.

WILDLAND-URBAN INTERFACE ACTIONS

Strategic Priority: Increase wildfire preparedness, response, and recovery in the WUI

4. Develop community wildfire preparedness, response, and recovery plans.

ACTION DESCRIPTION: Many existing and newly identified WUI communities are unprepared for the potential impacts of wildfire. Planning at the individual household level is important but community-scale wildfire risk assessment and planning is needed for coordination of complex issues like evacuation and mitigation activities that extend beyond individual parcels.

This action calls for WUI local governments and King County, as the local government for unincorporated King County, to conduct a wildfire risk assessment and develop a community wildfire protection plan focused on wildfire preparedness, response, and recovery for their community.

Wildfire risk assessments. 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. More specifically, the assessments will help identify:

- Where the community exposure to wildfire hazard is greatest;
- Who and what is most vulnerable to wildfire, and why;
- How wildfire may impact the community; and
- Where and what type of wildfire risk interventions may be most appropriate for reducing identified risks.

Wildfire risk assessments should include evaluation of community data on race/ethnicity, languages spoken, income, and related socioeconomic factors to understand equity implications as they relate to wildfire risk. The assessment should also account for factors that may limit safe evacuation and/or response to wildfire, such as neighborhood ingress/egress, access to water sources, and inaccessible or steep terrain.

Wildfire plans. Wildfire preparedness, response, and recovery plans should identify approaches that communities will take to support:

- 1. Household and community-scale risk reduction and preparedness. This may include updating codes and policies that reduce wildfire risk and improve public safety (see Action 5), expanding household technical assistance (see Action 6), and expanding outreach activities related to wildfire awareness and risk reduction (see Action 11), for example.
- 2. **Effective response to wildfire when it occurs.** This may include evacuation planning, establishment of "safety zones", and identification of water supplies and staging areas, for example.
- 3. **Post-fire recovery.** This may include debris staging and removal; small business assistance; financial support for impacted households; and coordination with local, state, and federal partners to accelerate forest recovery and mitigate post-fire risks (e.g., landslides, flooding) (see Action 2), for example.

Wildfire risk assessments and associated planning activities should account for current and projected changes in wildfire potential due to climate change. Once completed, community wildfire risk assessments and plans should be updated periodically to reflect changes in development patterns and other factors that can influence wildfire risk at a community scale.

IMPLEMENTATION PARTNERS: WUI communities, King County Office of Emergency Management (KCOEM), King Conservation District, local fire districts, local police departments, transportation agencies, natural resource management agencies, public/private critical asset owners, Tribes

IMPLEMENTATION FEASIBILITY: Moderate. Capacity to complete the risk assessment and develop community plans may be a challenge for some jurisdictions. To help facilitate this work, KCOEM will develop or adapt existing planning templates and guidance to support risk assessment and planning efforts. If a community chooses to initiate the planning process in their own jurisdiction, KCOEM can provide training on how to lead the planning process. Once the planning process has been initiated, KCOEM can support the planning team with technical support, information, public education materials, and mapping.

IMPLEMENTATION TARGET: Plans completed or in development by 2027; risk assessments and plans updated periodically after initial development.

WHAT DOES SUCCESS FOR THIS ACTION LOOK LIKE?

- WUI communities/King County have identified, prioritized, and mapped wildfire risks within their communities.
- WUI communities have robust plans in place to prepare them for wildfire.
- Plans and risk assessments are updated regularly at a frequency determined by the community.
- Plans are well socialized with stakeholders and residents.

5. Advance wildfire risk reduction through effective policies, plans, and codes.

ACTION DESCRIPTION: Policies, plans, and codes may help advance—or conversely hinder or conflict with—wildfire risk reduction objectives. For example, permitting practices may complicate and add costs to tree maintenance and tree removal within designated distances from a home even though such activities could reduce potential wildfire travel pathways. Development codes may also need to be updated to ensure sufficient emergency access and evacuation routes for new subarea developments.

Implementation of recently adopted statewide WUI codes²⁰ may create additional challenges and opportunities at the local level. The codes, which will be a new experience for many jurisdictions and builders, include new baseline WUI construction requirements for roofs, exterior walls, appendages and projections, and driveway access.

This action calls on WUI local governments and King County, as the local government for unincorporated King County, to advance wildfire risk reduction through the adoption and implementation of effective policies, plans, and codes. More specifically, this action calls for:

²⁰ Revised Code of Washington (RCW) 19.37.560 was initially adopted in 2018, with implementation tied to completion of WUI maps updates by the Washington Dept. of Natural Resources. Although the State Building Code Council (SBCC) later rescinded WUI amendments due to conflicts with the Washington Administrative Code, it is anticipated that the SBCC will adopt the 2021 WUI code (WUIC) for Washington with an anticipated statewide effective date of July 1, 2023.

- · effective implementation of new statewide WUI codes, and
- updating plans, policies, and development codes to promote or otherwise remove or reduce conflicts with best practices that reduce wildfire risk and improve public safety in the event of a wildfire.

Existing or potential policies, plans, and codes relevant to this action include comprehensive plans, community wildfire plans (see Action 4), climate preparedness plans, land use maps and overlay zones, development standards (including standards for structure density and location, building materials and construction, vegetation management, emergency vehicle access, water supply, and fire protection), and site plan review procedures.

Some local policy and code changes may require coordination with King County and/or other organizations to achieve effective action. Policy and code changes may also be possible statewide. Engagement with stakeholders, including residents, Master Builders, local real estate and insurance agents, community leaders, engineering firms, and developers, will be important to developing new policies and codes.

Implementation partners: WUI communities, King County Dept. of Local Services (DLS), King County Dept. of Natural Resources and Parks, King Conservation District

IMPLEMENTATION FEASIBILITY: Moderate. Coordination with municipalities throughout the WUI on implementation of development codes meeting a set standard could be complex. To help build consistency across King County jurisdictions, King County will develop educational information that provides guidance on how the new WUI codes apply to structural construction products. The resources needed to create and distribute code-related educational materials may require increased budget expenditures beyond the current capacity of King County DLS.

IMPLEMENTATION TARGET: ongoing, in accordance with timing of policy and code schedules WHAT DOES SUCCESS FOR THIS ACTION LOOK LIKE?

- Consistent educational materials supporting WUI code implementation are available on jurisdiction websites across King County.
- Development codes, policies and plans are reviewed to remove conflicts with, and promote integration of, best practices. This review occurs at both the State level and at King County. Individual jurisdictions with extensive WUI areas are supported with technical knowledge and financial resources to conduct this code and policy review.
- Stakeholders understand and support the need for updated WUI goals, policies, land use regulations and building codes.

6. Create King County-specific wildfire mitigation best management practices and expand household-level wildfire mitigation assistance.

ACTION DESCRIPTION: Concern about wildfires is increasing among King County residents, leading to greater demand for information and services focused on protecting homes and property from wildfire. This includes increased homeowner interest in programs like the National Fire Protection Association's (NFPA) Firewise USA® program.

The Firewise USA® program has been widely used in fire-prone areas across the United States to provide recommendations for protecting buildings and breaking up of the continuity of fuels on properties in wildfire-prone environments to increase the chances of homes and communities surviving a wildfire event. Programs such as these also provide a collaborative framework to help neighbors in a geographic area get organized,

find direction, and take action at the neighborhood or community scale.

King Conservation District (KCD) will work with partners to adapt recommended practices and informational material for local climate and ecology. A key objective is implementing wildfire protection measures around homes and structures while maintaining forested areas for biodiversity, ecosystem services, and resiliency. KCD and partners will share these updated measures with homeowners through public presentations, web resources, informational video production, and other approaches.

KCD will also work with partners to address growing capacity constraints for meeting homeowner and community demand for private property wildfire mitigation assistance by offering on-site assessments for property owners, connecting property owners to additional resources, such as funding, and increasing the adoption of recommended practices.

IMPLEMENTATION PARTNERS: KCD, King County Dept. of Natural Resources and Parks, WSU Extension Forestry, University of Washington, WUI communities, Washington State Dept. of Natural Resources, Eastside Fire & Rescue

IMPLEMENTATION FEASIBILITY: Moderate. Firewise USA® and related best practice resources have been created by other agencies and can be adapted for use in King County, decreasing the work needed to produce customized information for King County. Additional funding and coordination between partners are needed to address capacity limits for site visits and technical support.

IMPLEMENTATION TARGET: 2027, ongoing thereafter (capacity building/expanding application in King County)

WHAT DOES SUCCESS FOR THIS ACTION LOOK LIKE?

- King County-specific wildfire mitigation best practices and associated materials have been developed and are being distributed in a variety of formats and fora.
- Implementation partners have dedicated resources and defined roles for delivery of wildfire mitigation assistance in King County.
- Capacity to meet requests for Firewise USA® and similar types of private property wildfire mitigation assistance has been increased.
- More King County residents and communities are adopting and maintaining recommended practices.

7. Increase monitoring and control of invasive species that increase wildfire risk in the wildland-urban interface.

ACTION DESCRIPTION: Invasive plants can increase the risk of forest fire by acting as an accelerant for fire (when extremely flammable) and/or by acting as ladder fuels that carry a fire from ground level to the crown of trees. Scotch broom (*Cytisus scoparius*) is a flammable invasive species that is widespread in disturbed areas such as roadsides and utility corridors. Clematis (*C. vitalba*), English ivy (*Hedera spp.*), and field bindweed (*Convolvulus arvensis*) are locally abundant invasive species that can be considered ladder fuels due to their tree climbing habits, potentially causing a more destructive and difficult to control crown fire. English holly (*Ilex aquifolium*), a flammable thicket-forming understory shrub, can also function as a ladder fuel.

This action calls for landowners and managers to increase monitoring and control of invasive species that increase wildfire risk, particularly in priority areas like roadsides and utility corridors within the WUI. This work may include:

- Assessing and mapping the distribution and abundance of flammable invasive species in priority areas
 of the WUI, including roadsides and utility corridors;
- Developing control plans.
- Using an integrated pest management strategy, coupled with existing best management practices such
 as initial herbicide treatments and mechanical mowing, to remove invasive species;
- Promoting planting of fire-resistant native species;
- · Monitoring for regrowth from the seed bank; and
- Developing a long-term adaptative management strategy based on the effectiveness of initial treatments.

Once the flammable invasive species have been controlled, treated areas can be restored with native forbs, shrubs, and trees to encourage pollinators, provide forage for native birds and mammals, and improve healthy ecosystem functioning. Participation by all levels of landowners, from residential to large public and private landowners, is encouraged given the potential for invasive species to reinfest controlled areas from adjoining uncontrolled areas. Technical assistance and scaled approaches for residents and small landowners is available from many of the implementation partners listed for this action.

IMPLEMENTATION PARTNERS: King County Dept. of Natural Resources and Parks, Washington Invasive Species Council, Washington State Dept. of Transportation, Washington State Dept. of Natural Resources, Washington State Parks and Recreation Commission, U.S. Forest Service, WUI communities, King Conservation District, Mountains to Sound Greenway Trust, Forterra, Bonneville Power Administration, Puget Sound Energy, Seattle Public Utilities.

IMPLEMENTATION FEASIBILITY: Hard. This action requires sustained participation and funding from a diverse set of stakeholders to be successful. Sources for filling funding gaps are currently unknown.

IMPLEMENTATION TARGET(S): 2027, ongoing thereafter (via integration into ongoing control efforts)

WHAT DOES SUCCESS FOR THIS ACTION LOOK LIKE?

- Landowners are educated about highly flammable invasive species.
- Control plans have been developed for priority areas within the WUI.
- The relative abundance of flammable invasive plant species is being reduced, particularly near publicly maintained roads in the WUI.
- The abundance and diversity of native forbs, shrubs, and trees is increasing in treated areas.
- The biodiversity of native invertebrate fauna (pollinators), birds (especially breeding Neotropical migratory birds), and small and large mammals in increasing in treated areas.

8. Implement the "Ready, Set, Go!" public education evacuation program in the wildland-urban interface.

ACTION DESCRIPTION: Most natural hazards in King County require community members to "shelter-in-place". Wildfire is one of the few hazards, however, where individuals may need to evacuate their home, necessitating the need for a way to help residents know how, and when, to be ready to act on evacuation orders.

This action calls for the King County Office of Emergency Management (KCOEM) to work with WUI communities to develop and implement the "Ready, Set, Go!" public education program to better prepare residents for evacuation and ease emergency communication challenges for response agencies when a wildfire event occurs. The program, which has been implemented by communities in other parts of the western United States, details what residents can do to be prepared to evacuate before a wildfire, when a wildfire is threatening their community, and, finally, when an evacuation must occur.

Program materials will be developed in a variety of languages and accessible formats to ensure equitable access to program information and alerts. Using already established in-roads with communities, KCOEM and partners will socialize the curriculum through public presentations, web resources, informational video production, and other formats. King County will utilize the "Public Input" platform to track engagements and metrics for engagement.

IMPLEMENTATION PARTNERS: King County Office of Emergency Management, WUI communities, law enforcement agencies, local fire departments

IMPLEMENTATION FEASIBILITY: Moderate. Multiple jurisdictions across the western U.S., including communities in eastern Washington, have implemented Ready, Set, Go! in their communities. Best practices can be learned from jurisdictions who have implemented the program and who have experienced impactful wildfires. A variety of readily available public education products can also be utilized, significantly decreasing the work in product development. Funding pools may already be accessible. While development of materials may be easy, ensuring that the information reaches the whole community is always a challenge.

IMPLEMENTATION TARGET: 2023

- Robust public education materials, developed in a variety of languages and formats, are available and have been shared with WUI communities.
- WUI residents are familiar with the "Ready, Set, Go!" steps and know how to receive and get information in the event of a wildfire.

RESPONSE ACTIONS

Strategic Priority: Support quick, effective, and safe responses when wildfire occurs

9. Implement countywide training standards for all levels of wildfire response.

ACTION DESCRIPTION: Operational effectiveness and firefighter safety are paramount when responding to a wildfire. Implementation of common training expectations and county-wide use of wildland appropriate personal protective equipment (PPE) are important to achieving this goal. Furthermore, wildland-specific training enables departments to satisfy Washington State Labor and Industries requirements for wildland and urban interface suppression operations.

This action calls for all King County fire departments to train response personnel to consistent minimum standards for wildfire response and maintain annual refresher training as required by the National Wildfire Coordination Group, Washington State Dept. of Natural Resources, or the Washington Administrative Code. Recommended training includes the following:

- National Wildfire Coordination Group S-190: Introduction to Wildland Fire Behavior
- National Wildfire Coordination Group S-130: Firefighter Training.
- International Association of Fire Fighters: Responding to the Interface (RTI) basic firefighter safety training

Concurrent to baseline training standards, this action also calls for King County fire departments to pursue appropriate levels of wildland/interface PPE. Fire suppression personnel cannot work for more than 60 minutes at a wildland/interface incident in structural PPE. Firefighters trained in wildland suppression strategies and tactics should also be equipped with wildland/interface PPE. Appropriate PPE will align with recommended training and allow for extended operational periods.

IMPLEMENTATION PARTNERS: King County Fire Chiefs Association, local fire departments and law enforcement agencies, South Puget Sound Fire Defense Board, King County Office of Emergency Management

IMPLEMENTATION FEASIBILITY: *Moderate*. The recommended training and PPE requirements are time consuming and may have finical impacts for some agencies. Endorsement by the King County Fire Chiefs will be a necessary first step in adopting the recommendation for all King County Fire agencies.

IMPLEMENTATION TARGET: Training complete or in progress by 2023

- All King County firefighters trained to S130, S190 and RTI standards.
- King County training divisions are providing annual refresher training and maintaining appropriate training records for all King County.
- King County firefighters have the appropriate levels of wildland/interface personnel protective equipment and associated training for safe use of that equipment.

10. Establish partnerships and agreements to ensure timely and costeffective access to wildfire firefighting resources.

ACTION DESCRIPTION: Rapid initial suppression activities, aided by early access to specialized resources such as helicopters, fixed-wing aircraft, bulldozers, and certified response personnel, are the most meaningful action that fire departments can take to safely protect life and property in the WUI. However, most King County fire agencies do not have the financial resources needed to pay for these resources, even for a moderate scale incident. Concerns about cost reimbursement have also left King County fire departments hesitant to request specialized resources. Finally, the process for requesting hazard-specific resources must meet specific requirements and takes time. Collectively, these factors can slow response capabilities and hinder operational effectiveness.

This action calls on local King County fire departments, the King County Office of Emergency Management (KCOEM), and the Washington State Dept. of Natural Resources (WADNR) to work collectively to facilitate easier and more cost-effective access to wildfire response resources. More specifically:

- King County fire departments and KCOEM should work collectively to establish partnerships and
 operational agreements (e.g., interlocal agreements, automatic aid agreements, and Memorandums
 of Agreements) with local contractors for timely access to wildland/interface equipment and
 supplies. These local agreements can provide stop-gap resources until state or federal resources can be
 secured.
- The King County Fire Chiefs Association, KCOEM, and the WADNR should work together to facilitate
 earlier access to helicopters for initial attack. Additionally, KCOEM and King County Fire Chiefs
 should work with WADNR to develop a cost-share model that supports easier access to resources.
 Agreements should be created in recognition of the increased risk and need for rapid initial attack in
 populated areas.

By facilitating easier access to response resources and taking the financial concern out of the wildfire response equation, first responders will be able to make more effective response decisions in mitigating the emergency.

IMPLEMENTATION PARTNERS: King County Fire Chiefs Association, King County Office of Emergency Management, local fire departments, Washington State Dept. of Natural Resources, private contractors, U.S. Forest Service

IMPLEMENTATION FEASIBILITY: *Moderate*. Recommendation will require multiple fire agencies to enter into agreements with private and public partners.

IMPLEMENTATION TARGET: 2027

- Fire departments have the necessary agreements in place to facilitate access to as-needed specialized fire response resources.
- Costs and cost-reimbursement concerns are no longer seen by fire departments as a barrier to calling in specialized resources.
- Fire departments are quickly accessing the right equipment at the right time, facilitating more effective and safer responses to a wildfire.

CROSS-CUTTING ACTIONS

Strategic Priority: Support wildfire risk reduction more broadly

Implement a coordinated approach to public education and outreach on wildfire risk reduction in King County.

ACTION DESCRIPTION: Many King County residents are unaware of wildfire risk locally, how climate change affects wildfire potential in our region, and actions that can be taken to reduce wildfire risk.

This action calls for the King County Office of Emergency Management (KCOEM), King County Dept. of Natural Resources and Parks (KCDNRP), and King Conservation District (KCD) to work with WUI local governments and subject matter experts to develop and implement a coordinated approach to public education and outreach related to wildfire risk reduction and preparedness in King County. A coordinated approach will help break down silos and avoid inconsistent messaging across jurisdictions and partners. This is particularly important in western Washington given the complexity of western Washington wildfires and forest ecology. Coordination will also allow participating jurisdictions to leverage existing partnerships, share resources, and develop best practices.

To help inform this work, KCOEM will host a roundtable with key partners to develop a cross-discipline outreach and communications plan. The plan will identify priority topics for engagement, key messages, and approaches to engaging with a range of audiences. The plan will be socialized with additional partners once the communication plan has been developed. The plan will be revisited at a schedule determined necessary by the planning team.

IMPLEMENTATION PARTNERS: King County Office of Emergency Management, King County Dept. of Natural Resources and Parks, King Conservation District, WUI communities, Tribes, King County fire departments, natural resource managers, Public Health–Seattle & King County, University of Washington (School of Environmental and Forest Sciences, Climate Impacts Group)

IMPLEMENTATION FEASIBILITY: *Moderate.* While development of the communications outreach plan will not be difficult, implementation and adherence is a consistent challenge with joint messaging and public education.

IMPLEMENTATION TARGET(S): 2023 (outreach plan); ongoing (for outreach and engagement activities)

- King County has a robust wildfire communications plan that captures the unique nature of western Washington wildfire and provides the tools needed to effectively communicate to the community.
- A variety of outreach materials and engagement approaches are being used in King County to inform
 residents about current and projected wildfire risk in King County and standardized actions and
 recommendations they can take to reduce wildfire risk.
- King County residents have a better understanding of current and projected wildfire risk in King County and implement actions they can take to reduce wildfire risk.
- Residents are aware when fire danger is especially high and adjust behavior accordingly.

12. Enhance and expand opportunities for shared learning and coordination related to wildfire risk reduction.

ACTION DESCRIPTION: Wildfire risk reduction benefits from ongoing opportunities for shared learning and information exchange between organizations and subject matter experts involved in the work, including local planners, first responders, natural resource managers, emergency management officials, and researchers.

This action calls for King County), natural resource management agencies, conservation agencies, and other partners to enhance and expand opportunities for shared learning, coordination, and partnership that supports effective implementation of strategy actions. Opportunities may include meetings, workshops, webinars, listservs, online forums, and shared resource hubs that help participants stay current on:

- · Western Washington wildfire science and climate change impacts,
- Community/organizational wildfire planning activities and needs,
- Changes in wildfire response capabilities and procedures,
- Best management practices for wildfire risk reduction,
- Outreach and engagement resources and opportunities
- Opportunities for collaboration, partnership, and funding.

Where possible, existing opportunities should be leveraged. New opportunities such as periodic convenings should also be considered.

IMPLEMENTATION PARTNERS: King County Office of Emergency Management, King County Dept. of Natural Resources and Parks, extension agencies (King Conservation District, WSU Extension Forestry), local fire departments, WUI communities, Tribes, natural resource management agencies, University of Washington (School of Environmental and Forest Sciences, Climate Impacts Group)

IMPLEMENTATION FEASIBILITY: *Easy*. This action can leverage existing meetings to help meet the goals of this action. Periodic meetings, workshops, and webinars specifically focused on this work can also be held.

IMPLEMENTATION TARGET(S): 2027 (via integration into ongoing control efforts)

- Existing meetings and other fora for ongoing engagement on wildfire preparedness have been identified. Those meetings are being used to support continued learning and action implementation as appropriate.
- New opportunities for continued learning and cross-disciplinary information exchange (workshops, meetings, and webinars) are being created.
- Organizations and communities involved in implementing strategy actions are utilizing these
 opportunities to stay connected and informed.

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