

Lake Forest Park

Climate Action Plan

May 2024

Prepared by Lake Forest Park Climate Action Committee and edited by Cascadia Consulting Group

Acknowledgments

Development of the 2024 Climate Action Plan for Lake Forest Park required the effort of many people in our community. Thanks to all those who assisted in this process and who will engage in implementation in the future.

Lake Forest Park Mayors

Mayor Jeff Johnson
Mayor Tom French

LFP councilmembers

Lorri Bodi
Thomas French, *2024 elected Mayor*
Tracy Furutani
Larry Goldman
Paula Goode
Jon Lebo
Semra Riddle
Ellyn Saunders
Philippa Kassover, *retired 2024*

LFP Climate Action Committee (CAC) members

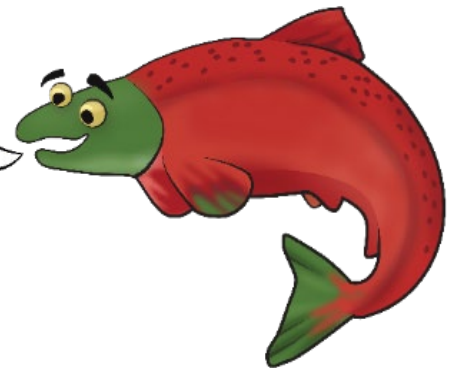
Tracy Furutani, Council Liaison
Miriam Bertram
Dana Campbell
Jessica Côté
Tamara Erickson
Linda Holman
Sarah Phillips, *Chair*
Brian Saunders
Anne Udaloy, *Vice Chair*
Matt Son
Anna Côté graduated,
Student member - currently vacant
Bella Tancretti graduated,
Student member - currently vacant
Cory Roche, *LFP Staff to the Climate Action Committee*

Residents of Lake Forest Park engaged with the committee, including the people that responded to the Climate Survey and those who volunteered to help tally survey responses, as well as the many people who attended our booths at community events, made suggestions and comments, initiated and joined our book club, and attended the LFP CAC monthly meetings.

Neighboring cities and their climate/sustainability managers

Cascadia Consulting Group

Hi! I'm _____,
the Kokanee.
Me and my
family are in
danger from
climate change!





Executive Summary

The Lake Forest Park (LFP) Climate Action Committee (CAC) has developed a Climate Action Plan to reduce LFP's contribution to climate change and prepare the LFP community for climate impacts. The Mayor of LFP was authorized by the City Council to sign onto the King County Cities Climate Collaborative (K4C) Joint Letter of Commitment: Climate Change Actions in King County in March 2019. Included in this resolution (1726) is a commitment to reduce GHGs by 50% by 2030, compared to a 2007 baseline.

The Climate Action Committee engaged the broader Lake Forest Park community during development of the Climate Action Plan through a survey and public events. The LFP community indicated the importance of taking climate action. The City and the CAC will continue to engage the LFP community throughout implementation.



What are the Effects of Climate Change on Lake Forest Park?

It is critical to take action because the city is already experiencing the effects of climate change, including flooding, wildfire smoke, and heat dome events.



Extreme heat days are increasing in number. There were 51 extreme heat days in the Seattle in 2022. This is 23 more extreme heat days than the 1970s average (Stacker 2023)



Heat waves affect health and well-being, especially that of seniors, those who are overweight or have heart disease or high blood pressure, and young children (CDC 2023). Exposure to extreme heat also puts outdoor workers and those who work in hot environments at risk (CDC NIOSH 2023). Heat waves also inequitably effect those who cannot afford air conditioning.



Reduced snowpack is affecting water supply by reducing seasonal storage of freshwater, leading to reduced runoff and streamflow, and creating drought conditions in the western US (Siirila-Woodburn et al. 2021).



Change in climate is impacting local gardens by shifting the region to a warmer hardiness zone (Zhou 2023). Earlier spring temperatures are creating an early bloom when insects that pollinate the plants have not arrived, which can reduce pollinator survival, plant reproduction, and bird populations that rely on these plants (USDA 2024).



Climate change is expanding the habitats of disease-carrying insects and animals. Mountain pine beetles are impacting our forests, ticks carrying Lyme disease are beginning to arrive in Western Washington, and Avian flu has already arrived, infecting backyard bird populations (Giles 2023).



Increasing temperatures are adversely affecting water temperatures in the lakes and streams, causing stress on stream ecosystems and fish populations (Mantua et al 2009).



Wildfires are increasing in size and severity, creating smoky conditions. Regional wildfire risk is causing more days with low air quality in Washington.

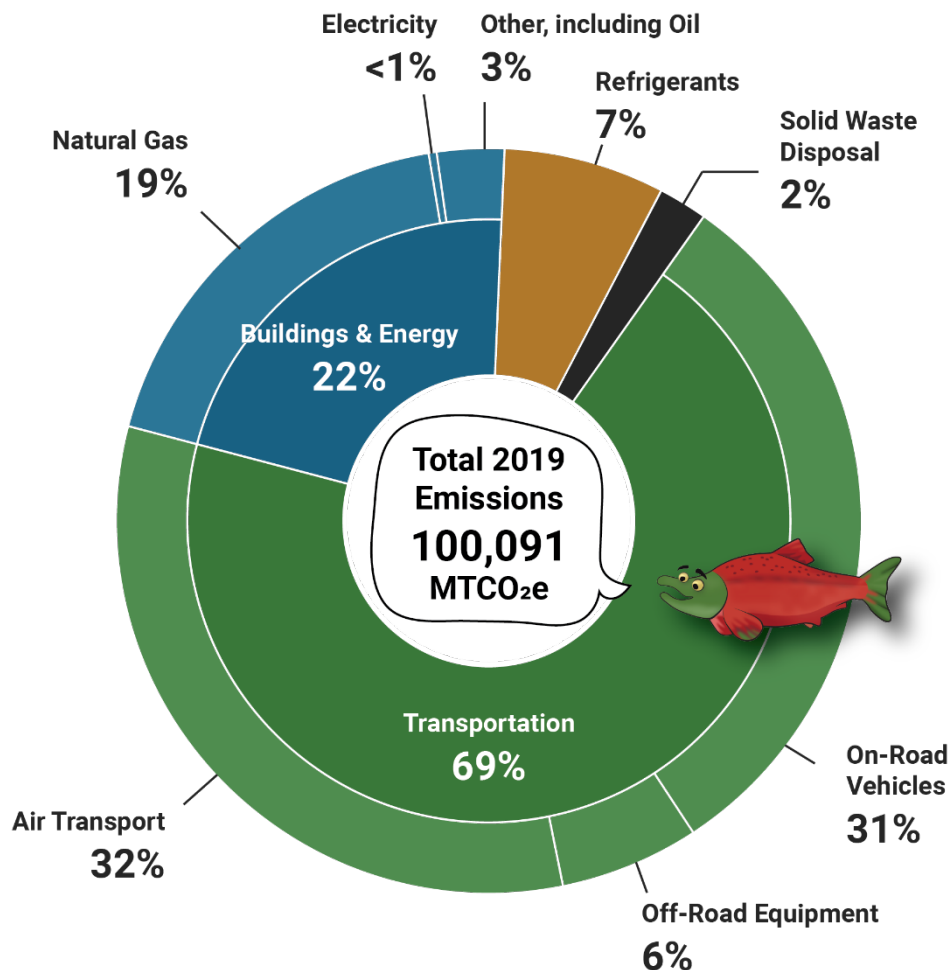


Rainstorms are becoming more intense, causing mudslides, flooding, and erosion and damage of streambeds.

What are the Sources of Greenhouse Gas Emissions in Lake Forest Park?

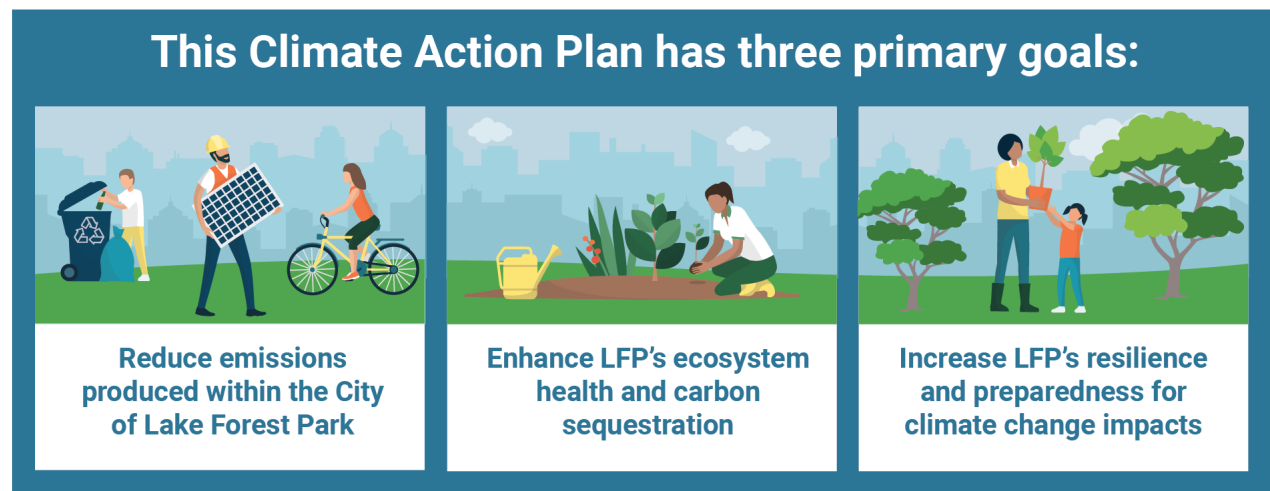
According to the K4C emissions report (Cascadia 2022), fossil fuel-based transportation is the largest source of GHG emissions in LFP. Fossil fuel-based transportation refers to the fuel burned to run vehicles and makes up over two thirds of emissions (69%). Within this total, air travel makes up 32% of emissions, on-road transportation accounts for 31% of emissions, and off-road (mostly heavy construction equipment) accounts for 6% of emissions.

The second largest category of GHG emissions in LFP comes from natural gas used for heating and cooking, which represents about 19% of emissions. A smaller amount of emissions comes from building materials and construction, while 7% of emissions come from refrigerants and 2% come from solid waste (Cascadia 2022).

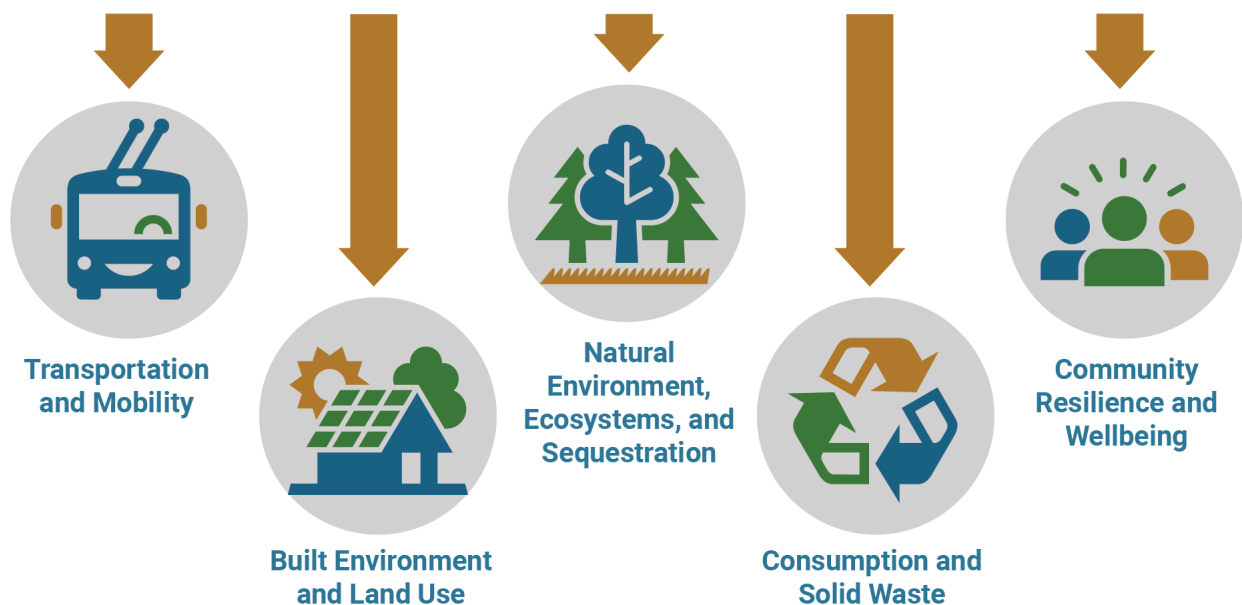


Why Does Lake Forest Park Need a Climate Action Plan?

The need for action to address climate change is urgent. Our survey of LFP residents (**Appendix 4: Survey Data**) showed that many LFP residents recognize this urgency and want to know what they can do. They also expect LFP to partner with other cities to implement policies. The Climate Action Plan is written to guide LFP leadership and citizens in achieving three major goals as described below.



To reach these goals, the Climate Action Committee is suggesting five areas of action



Lake Forest Park Climate Action Plan Executive Summary



To change the trajectory of climate change, every sector in society will have to make a concerted effort. The Climate Action Committee is also encouraging the city to make major changes in its municipal operations. No policy should be implemented, nor item purchased, without careful and public consideration of the impact on climate.

The City of Lake Forest Park has a small population with a beneficial tree cover but limited financial resources because of the small tax base. Making meaningful progress towards our goals will require increased city staff capacity, which will require the City to hire staff or significantly reallocate staffing resources. In addition, collaboration with neighboring cities must be a priority to effectively use limited resources.

An important mission of the LFP Climate Action Committee is to ensure that the actions outlined here will be a vital and evolving guide for governance in Lake Forest Park, regularly updated to create a living document. The plan presented here is intended to guide the City Council in its policy decisions, public outreach, purchases, hiring, and strategy over the long term. The plan is also intended to inspire citizen and community action to support the plan. The immediacy of climate change requires swift implementation of best practices and vigilant, ongoing updates of this action plan to ensure continued support for the growing and changing needs in our community.

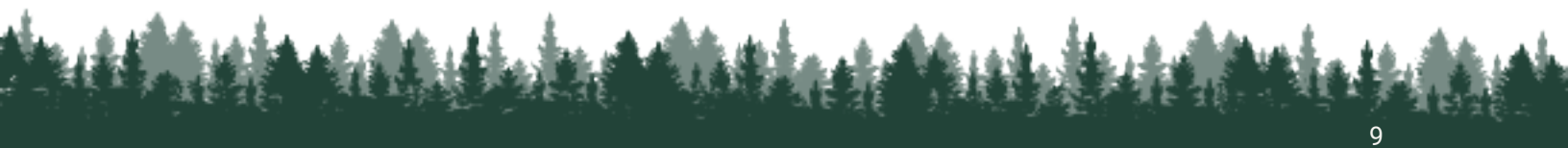


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Glossary

Term	Definition
Climate Action Committee (CAC)	The Lake Forest Park committee is responsible for gathering and analyzing climate information and drafting this Climate Action Plan.
Electric Vehicle (EV)	A vehicle powered by a battery system and electric motor.
Greenhouse Gas Emissions (GHG)	Heat-trapping gases that warm the atmosphere and cause climate change, including carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O).
King County Cities Climate Collaborative (K4C)	A collaboration between King County and partner cities to coordinate and enhance the effectiveness of local government climate and sustainability action (Cascadia 2022).
Metric Tons of Carbon Dioxide Equivalent (MTCO₂e)	A unit of measurement that represents an amount of a greenhouse gas and communicates its impact on climate change in terms of units of carbon dioxide based on the global warming potential of the gas.
Net Zero Emissions	A goal of producing as few greenhouse gas emissions as possible through human activities and removing the remaining emissions from the atmosphere from processes such as carbon sequestration. Lake Forest Park has defined net zero as reducing emissions by 95% and removing the rest via sequestration.
Resilience Hub	A community-serving facility that is enhanced to support residents and coordinate resource distribution and services before, during, or after a natural hazard event.
Seattle City Light (SCL)	An energy utility providing electrical power to the Seattle area and Lake Forest Park in Washington state.
Sequestration	The process of capturing and storing atmospheric carbon dioxide in landscapes, including soil and vegetation. Sequestration processes can help achieve net zero emissions.
Vulnerable Communities	Those who are most likely to be impacted by the effects of climate change. These are community members that face historic and current inequities, often experience the earliest and most acute impacts of climate change and have limited resources and/or capacity to adapt to those impacts.

Vision & Goals

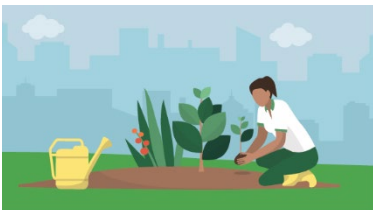
The City of Lake Forest Park (LFP) must act in concert with other jurisdictions to provide a roadmap for navigating the climate crisis. To move toward this vision, the CAP identified three broad goals:



**Reduce emissions
produced within the City
of Lake Forest Park**

Goal 1: Reduce Emissions

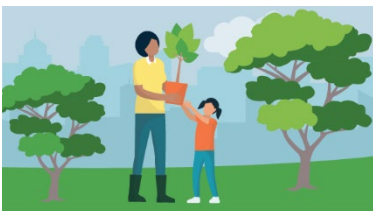
Reduce GHG emissions 50% by 2030 (compared to a 2007 baseline) and achieve 95% by 2050. To do this, we must prioritize initiatives that make the biggest difference in reducing GHG emissions produced by the LFP city government, residences, and businesses. These targets exceed [K4C targets](#) (Cascadia 2022).



**Enhance LFP's ecosystem
health and carbon
sequestration**

Goal 2: Enhance Ecosystem Health & Carbon Sequestration

Improve the health and resilience of local ecosystems to maximize their ability to remove carbon dioxide (CO₂) from the atmosphere, provide habitat, regulate the water cycle, and buffer the impacts of climate change.



**Increase LFP's resilience
and preparedness for
climate change impacts**

Goal 3: Increase Community Resilience & Preparedness

Protect and prepare all Lake Forest Park residents from the worsening impacts of climate change through resilient infrastructure, emergency preparedness, and enabling equitable community participation.

Committee Methods

This Climate Action Plan was written by the Lake Forest Park Climate Action Committee, whose ten members are residents appointed by Mayor Jeff Johnson and the LFP City Council beginning in February 2022. In preparing this document, the LFP Climate Action Committee (CAC) has gathered and analyzed information pertinent to climate concerns of Lake Forest Park and our surrounding area.

Specifically, the CAC has:



Reviewed existing Climate Action Plans from neighboring cities, including Kenmore, Bothell, and Shoreline, to identify best practices.



Reviewed the [2015 LFP Comprehensive Plan](#) (City of Lake Forest Park 2016), the [100-year Legacy Plan](#) (City of Lake Forest Park Legacy Task Force 2008), and previous climate initiatives by the city of LFP (**Appendix 1: Past and Present Actions Implemented in LFP**).



Compiled demographic, energy use, and emission production trends of Lake Forest Park residents using 2020 US Census data ([US Census Bureau 2020](#)), data provided by the Washington State Department of Licensing (2022), and the 2008 LFP Preliminary GHG Inventory and Proposed Climate Action Plan (Templin 2008 [**Appendix 5: Demographic Data**]).



Identified strategies and actions for the five focus areas that will help the City and broader LFP community meet its climate goals.



Built collaborations between LFP and neighboring cities and communities, through city commissions, committees, boards, and task forces.



Developed and implemented an engagement plan to survey LFP residents to gather insights and feedback on actions, strategies, and priorities to inform CAP development (**Appendix 4: Survey Data**).



Identified potential funding sources to achieve the Climate Action Plan goals.

Letter from the Mayor

Mayor
Tom French

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Councilmembers
Lorri Bodi
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Larry Goldman
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Semra Riddle
Ellyn Saunders

Dear Residents of Lake Forest Park,

I am pleased to introduce Lake Forest Park's Climate Action Plan. As the embodiment of the local community, city government can provide leadership in efforts to reduce our carbon footprint. Recognizing this in 2017, the City of Lake Forest Park became a member of the King County Cities Climate Collaboration (K4C), which adopted a goal of cutting countywide carbon emissions in half by 2030, and by 80% at the midpoint of the century (compared to a 2007 baseline).

The City has been taking action already: we are working to transition to battery-powered vehicles across both our police and public works fleets. LED lights have been installed at City Hall. A big thanks and appreciation to the tireless work of the Climate Action Committee volunteers, we have the City's first Climate Action Plan.

As the Climate Action Committee notes, implementing this plan, monitoring, and documenting the results will be the next goal. At recent meetings and through an online survey, Lake Forest Park residents have made it clear that global warming and the impact it will have on future generations is an important issue. Many of you have contributed your thoughts and ideas concerning measures the City and residents should take to reduce greenhouse gas emissions. These include improvements in energy efficiency, renewable energy, and changes in areas such as transportation, recycling, and landscapes. This valuable input from residents has informed the Climate Action Plan so that it is truly a document of our common interests.

I am certain that with the guidance of this plan, both the City government and Lake Forest Park residents can together make meaningful changes in our everyday lives and operations to reduce our carbon footprint. I look forward to working together toward a more sustainable future for Lake Forest Park and for all of us!

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom French", with a large, stylized flourish extending to the right.

Tom French, Mayor, City of Lake Forest Park



Section 1: Context



Climate Change

Ecosystems, and humans within them, must adapt to the changing environmental conditions. In LFP we are seeing climate changes that include more extreme weather days, including heavy rainfall, hotter summers, and earlier transitions to spring. Understanding and preparing for these changing systems will help us adapt and modify our expectations as we plan for a warmer and drier climate.

What is causing climate change?

Climate change refers to long-term shifts in temperatures and weather patterns due to human activity, which has altered our planet faster and to a greater extent than any events in the last million years.

Earth's average temperature has risen and fallen over its long history due to its positioning in space and changes in the atmosphere. However, in the last 200 years, human use of fossil fuels (coal, oil and gas) has released heat-trapping gasses (GHGs) that have accumulated in the atmosphere. These gasses include carbon dioxide (CO₂), methane (CH₄), and others. Like an ever-thickening blanket wrapping the Earth, accumulating GHGs trap heat close to the Earth's surface. They have increased Earth's average temperature so that it is now warmer than any time in the last 800,000 years; temperatures were previously this hot during the Pliocene, the previous geologic epoch (Kaufman 2023).

Since 2000, almost every year has exceeded the record of hottest average temperature set by the previous year (IPCC 2023). True to this trend, the months of June through December in 2023 were each their hottest on record on Earth as of January 8, 2024 (Lindsey and Dahlman 2024).

Figure 1. 5-year global mean temperature differences compared to 1850-1900 averages

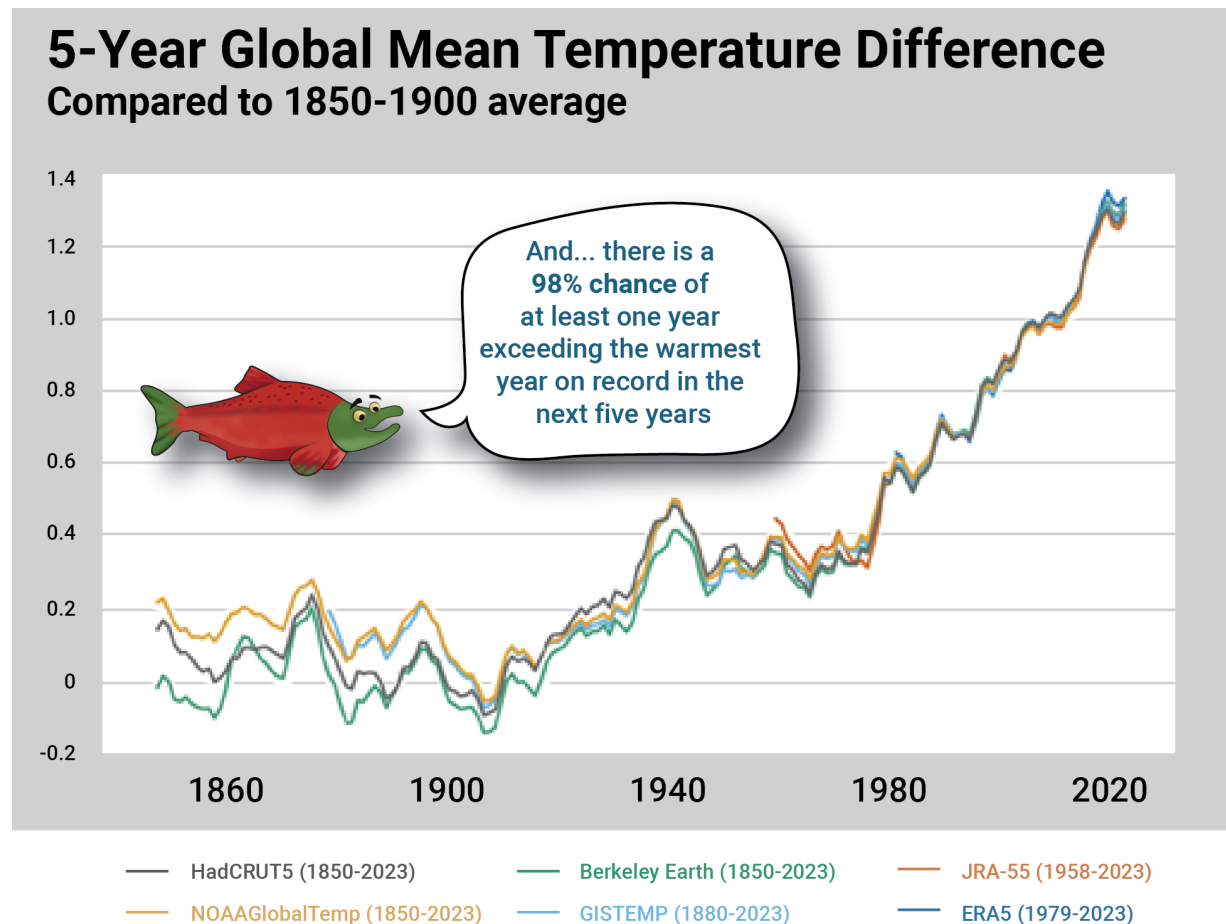


Figure 1 shows the five-year running average of global temperature anomalies (°C relative to 1850-1900) from 1850-1854 to 2019-June 2023 shown as a difference from the 1850-1900 average as estimated by the six agencies shown by colored lines. More information on the original data sets can be found in the index of [United in Science 2023, Sustainable Development Edition. World Meteorological Organization \(WHO\), 2023](#). Earth's closely interrelated systems compound the effect of temperature change, quickly disrupting conditions throughout the atmosphere, oceans, land, polar and glacial ice, and living organisms. Complex feedback loops further multiply impacts in ways that we cannot predict. Increasing temperatures on Earth have resulted in global shifts in weather patterns and increasing frequency of extreme events, and will also cause havoc in many ways we are not aware of until changes occur.

Our ecosystems, including human ones, have, over eons of time, developed dependencies to conditions of a stable climate. Disruption of this stability on the scope we are now experiencing threatens unprecedented risk to survival on a very broad scale.

Why We Need a Climate Action Plan

Warming of our planet, caused over the last century by human emission of heat-trapping greenhouse gasses into Earth's atmosphere, is rapidly altering the stability of ancient systems that support current life on Earth. In Lake Forest Park and the surrounding Puget Sound, these changes manifest in climate events that include accelerating incidents of extreme heat, drought, hazardous air quality caused by wildfires, and heavy storms that bring destructive flooding events.



Critical accumulation of GHG pollution in our atmosphere has already caused significant global climate change. The degree to which future warming occurs depends on choices made now to address greenhouse gas emissions. National goals, calculated to avoid future catastrophic climate events, require overall reduction of American GHG emissions by more than 6% per year (NCA5 2023). Consequently, our ability to manage compounding current and future climate impacts requires proactive preparation and investment in infrastructure.

Local government has a clear, crucial role in facilitating rapid transition to low-carbon, climate-resilient, sustainable communities. In 2019, Lake Forest Park City Council realized this commitment by voting to join K4C (LFP resolution 1726 on March 14, 2019), pledging a 50% reduction of 2007 baseline GHG emissions by 2030 and 95% reduction by 2050 (Cascadia 2022).

Preparing for Climate Impacts

The Puget Sound region is experiencing more extreme weather events more often, driven by the rapid warming of the planet that began with the industrial revolution (NCA5, 2023). The impacts of these extreme weather events can be devastating and lasting. The unprecedented [Pacific Northwest heat wave](#) from June 25-July 2, 2021 catastrophically impacted Washington, as well as neighboring states and Canadian provinces. Effects on humans and ecosystems continued well beyond July 2021 and included deaths among humans and aquatic populations, reduced crop and fruit yields, and subsequent river flooding from rapid snow and glacier melt. Months after the heat wave, a substantial increase in wildfires associated with the heat contributed to landslides and poor air quality in the Puget Sound region (White et al 2023).

Projections using different models agree that warming of the planet by 1.5°C (2.7°F) will cause a large range of extreme challenges in managing natural systems in WA(Figure 2), including:

Climate change amplifies existing risks and disparities, such as chronic health conditions, social and environmental circumstance, and pollution exposure, which can result in variable impacts on vulnerable communities within Lake Forest Park.

1. **Increasing temperatures and extreme heat.** There were 51 extreme heat days in 2022. This is 23 more extreme heat days than the 1970s average (Stacker 2023). The western U.S. is also experiencing more frequent multi-day heat waves, which are more widespread, hotter, and longer lasting than in previous decades.

Heat waves affect health and well-being, especially that of seniors, those who are overweight or have heart disease or high blood pressure, young children, those who work outdoors or in hot environments and those who cannot afford air conditioning (CDC 2023; CDC NIOSH 2023). Heatwaves also cause damage to infrastructure and create unhealthy aquatic habitats.

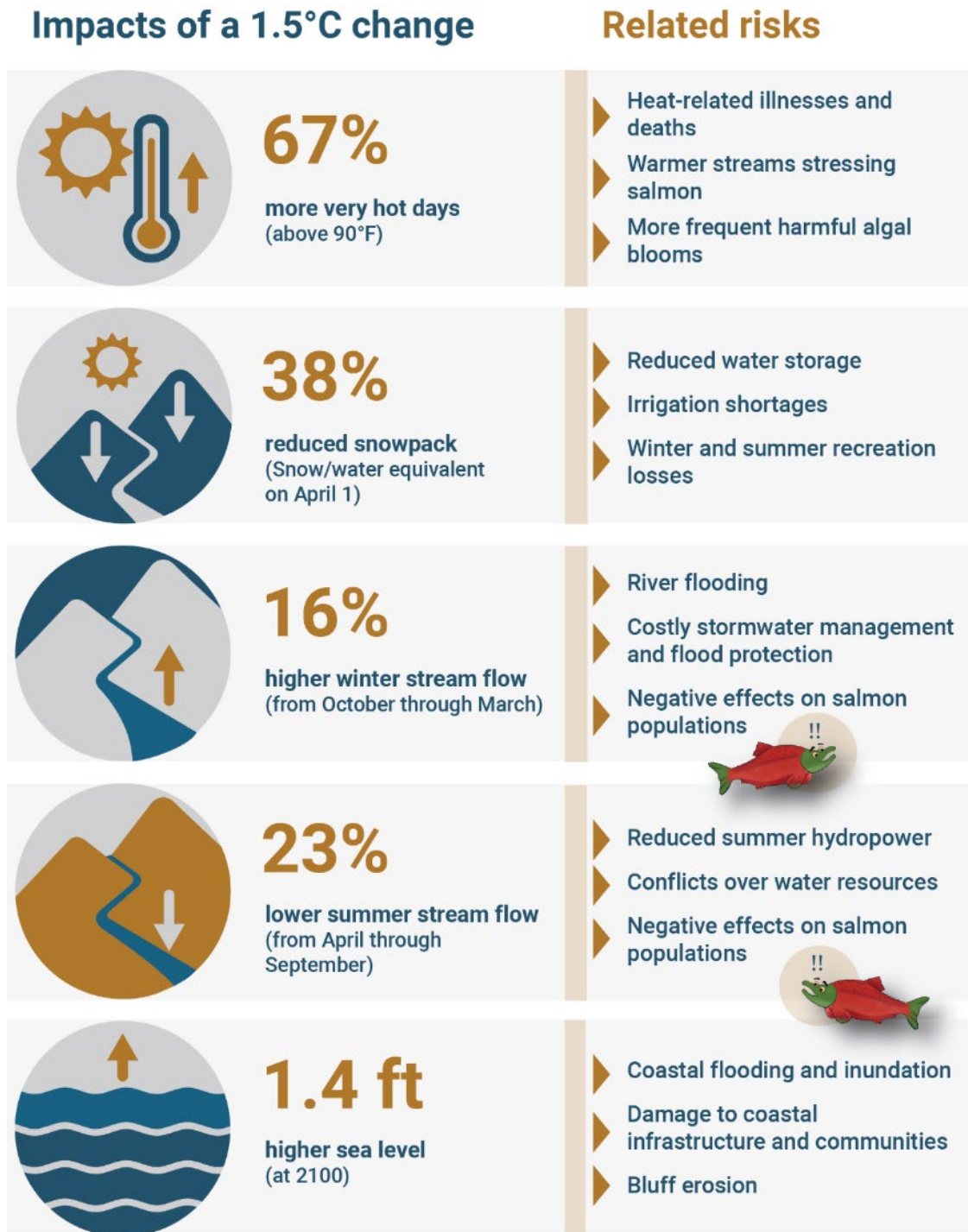
Increasing average temperatures are impacting the habitats of plants and animals as well, by expanding the habitats of disease-carrying insects and animals and affecting hardiness zones of local plants (Zhou 2023). Mountain pine beetles are impacting our forests, ticks carrying Lyme disease are beginning to arrive in Western Washington, and Avian flu has already arrived, infecting backyard bird populations (Giles 2023). Earlier spring temperatures cause disconnect between flowering and insect pollinator timing reducing survivorship of both plants and pollinators (USDA 2024).

2. **Changing precipitation patterns.** Heavy rain events are becoming more common, and more precipitation is falling as rain, rather than snow. Reduced snowpack is affecting water supply (Siirila-Woodburn et al. 2021). Heavy rainfall events, especially those that melt snow, cause mudslides and urban flooding, which damage homes and infrastructure, as well as flows of water that carry pollution and toxic algae and erode streambeds, harming salmon and other species depending on the water environment.
3. **Increasing wildfire severity and hazardous air quality.** Large, severe fires in the Pacific Northwest are linked to warm and dry conditions, which will likely occur more often as the earth continues to warm. Regional, and even distant, fires are also likely to create hazardous, smoky conditions in Lake Forest Park more often into the future.

In **Appendix 8. Climate Change Impacts**, we look in more detail at the climate change impacts that are already felt in Lake Forest Park.



Figure 2. Some projected impacts of 1.5°C (2.7°F) warming on Washington State



Notes: Projected changes in hot days relative to 1976- 2005, changes in sea level rise relative to 1991-2010; all others relative to 1970-1999. Data from: Fourth National Climate Assessment; Climate Change Impacts and Adaptation in Washington State; State of Knowledge: Climate Change in Puget Sound; Projected Sea Level Rise for Washington State – A 2018 Assessment. Figure reproduced from the UW Climate Impacts Group publication [No Time to Waste](#).

Reducing GHG emissions is crucial to avoid the worst of future climate impacts. However, halting emissions will not immediately bring GHG levels in the atmosphere back to pre-industrial levels, nor halt climate change completely. This is because many GHGs persist in the atmosphere for decades after being released. Governments, businesses, organizations, and individuals must anticipate the risks and take action so the community can adapt and thrive despite future climate change.

The range of impending climate impacts will challenge people, natural areas and infrastructure in varying ways and to different degrees. To ensure a healthy and resilient LFP community, the City of LFP will seek to advance climate action in the context of a comprehensive understanding of Lake Forest Park demographics and resources. Equitable and just inclusion for all can strengthen the city's ability to withstand climate impacts together.

Reducing Lake Forest Park's Greenhouse Gas Emissions

SOURCES OF EMISSIONS

In 2022 [The Puget Sound Regional Emissions Analysis Project](#), led by the King County Climate Data cooperative, released data estimating local community sources of GHG emissions generated from human activity. Specific emissions data for the City of Lake Forest Park are summarized in **Figure 3**.

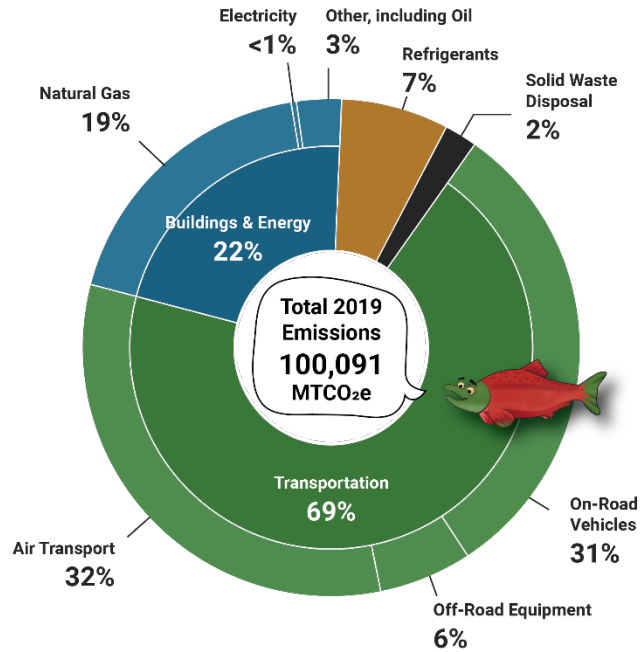
The majority (69%) of LFP GHG emissions come from the transportation sector. On-road vehicles (such as passenger vehicles, freight trucks, and transit) and off-road equipment (such as recreational, construction, industrial, lawn/garden, commercial and pleasure craft) create just over half of transportation emissions. Air transport (estimated for LFP based on average city-wide income) contributes the other half.

Energy used in government, business, and residential structures accounts for the next greatest source of emissions (22%) in LFP. While electricity supplied to LFP by Seattle City Light is produced from hydropower and contributes nearly zero GHG emissions, 75% of structures in LFP rely on natural gas for water heat, household heat, and/or cooking.

The remaining GHG emissions in LFP are produced from refrigerants (7%), which are used in refrigeration and air conditioning, and from solid waste disposal in landfills (2%). More detail on LFP's emissions and the breakdown of GHG emissions from City operations is discussed in **Appendix 2: K4C database – City**.



Figure 3. Human-created GHG emissions in LFP by sector (2019)



Notes: Data generated by the Puget Sound Regional Emissions Analysis Project and released as part of the [Geographic GHG Emissions Inventory Database](#).

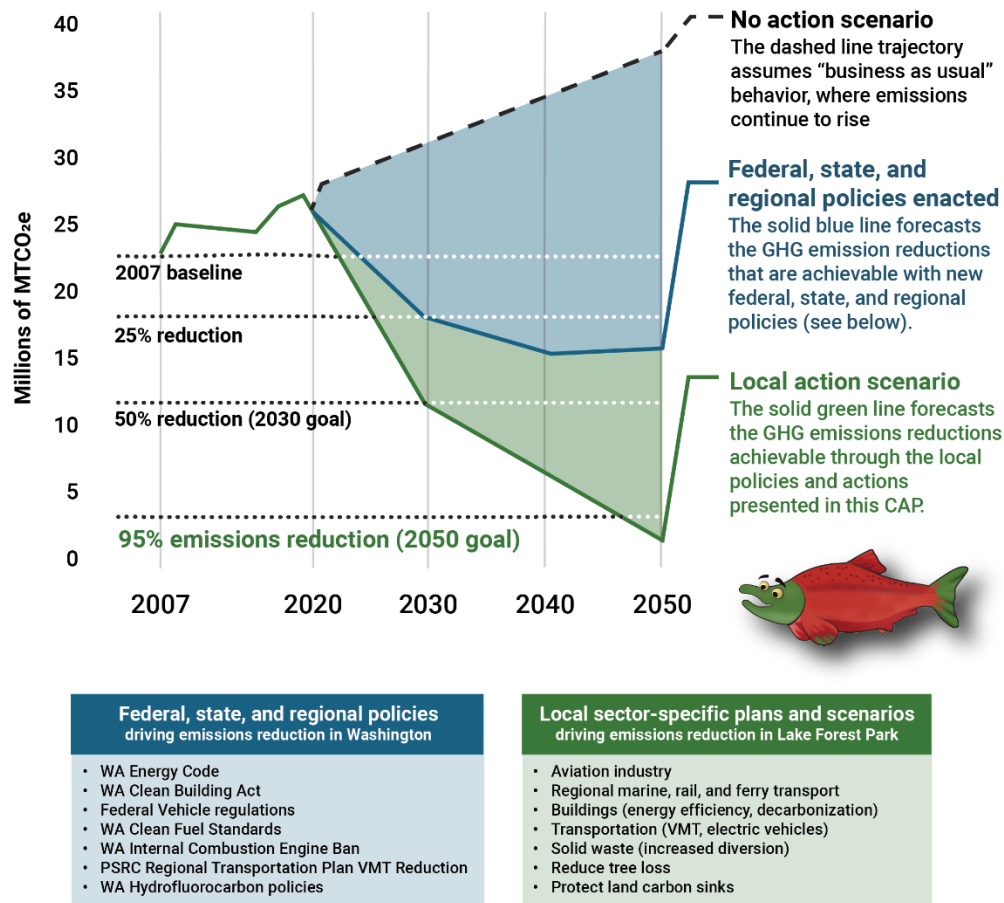
EMISSIONS REDUCTION TARGETS

Without significant intervention, global GHG emissions are projected to increase by another 50% by 2100 (**Figure 4**). Regulations at federal, state, and regional levels are expected to reduce GHG emissions by 35% from 2007 levels by 2030 and 50% by 2050. These regulations empower local action and are detailed further in **Appendix 3: Regulations**

Figure 4 illustrates the predicted GHG reductions from a local action scenario – the forecasted reduction in GHG with the combined actions of local, federal, state and regional policies. This emphasizes the critical role of locally focused actions in achieving emissions reduction goals of 50% of the 2007 baseline by 2030, 75% by 2040, and 95% by 2050.

K4C identifies sectors where concentration of local action will have the greatest effect on reducing GHG emissions in the Puget Sound area: buildings, transportation, solid waste disposal, and ecosystems where CO₂ is naturally stored (Cascadia 2022).

Figure 4. Forecasted emissions and reductions in Lake Forest Park associated with action at different organizational levels



Notes: Figure adapted from King County (Cascadia 2022).

Community Engagement & Values

Planning Context

The City of Lake Forest Park has been committed to sustainable living and environmental protection since its inception. LFP was mapped out in 1910, mostly for second residences of Seattle professionals looking for retreats to nature. In 1961, residents incorporated as the City of Lake Forest Park to control pressures of increasing development.

This planning and vision persist today and are set forth in the City of Lake Forest Park Comprehensive Plan (ratified in 2016), and the City of Lake Forest Park Legacy 100-year Vision Statement (ratified in 2018).

The Comprehensive Plan notes

“The Comprehensive Plan and Legacy Vision share a common vision of sustainability and environmental preservation. The Legacy Vision identifies a number of specific green infrastructure projects that could be implemented over time to achieve this vision. The Comprehensive Plan recognizes and incorporates the importance of environmental preservation in all elements of the plan and highlights specific green infrastructure projects identified in the Legacy Vision next to applicable goals and policies. Together, the Comprehensive Plan and Legacy Vision seek to promote, enhance, and preserve the City’s long-term environmental quality and green character.”

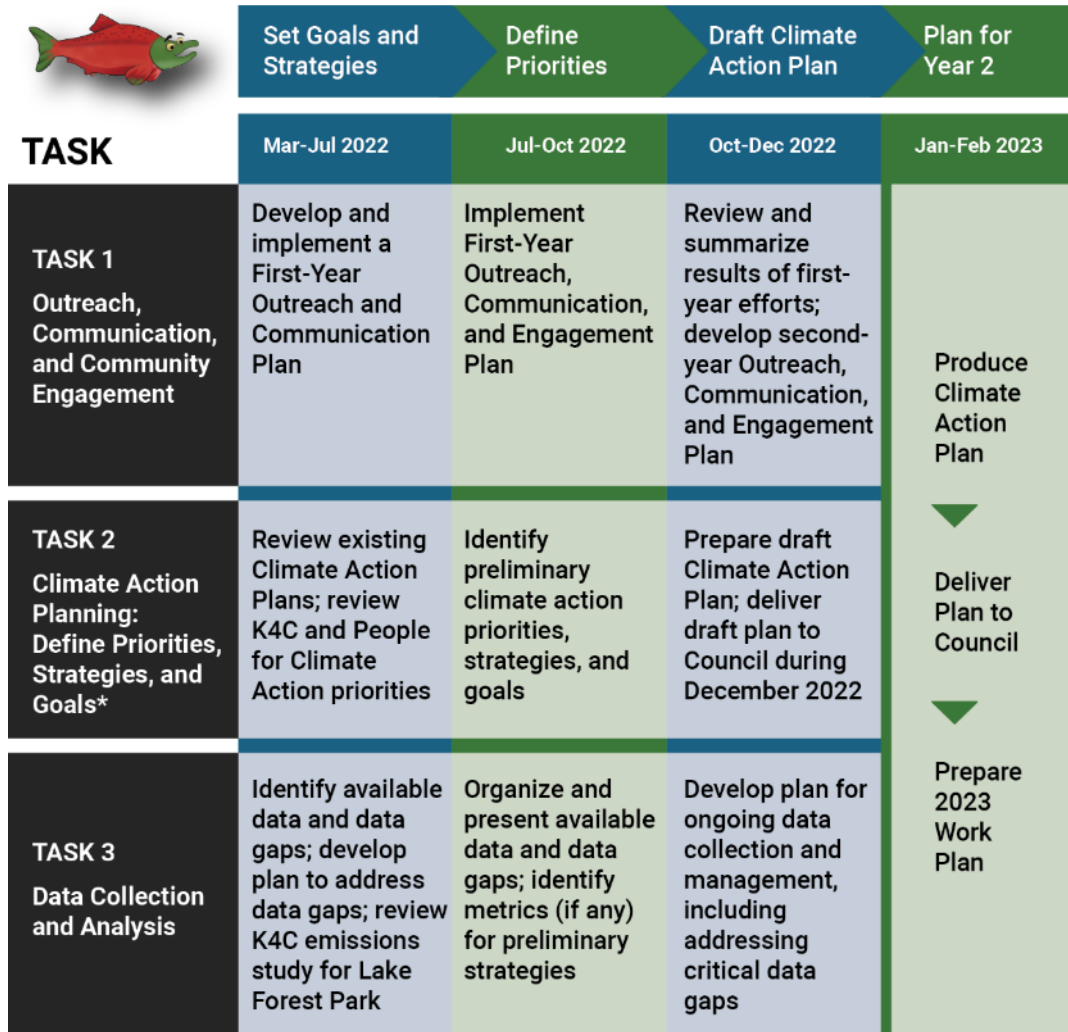
The LFP City Council’s creation of the LFP Climate Action Committee (CAC) demonstrates commitment to transform and accelerate local climate action. A key role of the CAC is to develop connections between the LFP community and City staff to enact climate action at all levels.



Planning Process

The LFP CAC defined timelines that provided structure for moving the committee toward the goal of designing the Climate Action Plan and for engaging the community (**Figure 5**).

Figure 5. CAC timeline presented to City Council in 2022



*Prioritizing buildings, transportation, and community resilience as critical sectors.

Community Engagement

OVERVIEW

Responding effectively to the climate crisis requires acting together to make significant changes in how we live our lives. The burden of change can be lessened when community members are empowered to participate in decision-making processes. Engaging the LFP community in the decision-making processes will help to build resilience and adapt to the challenges ahead.

As Almeida et al (2023) states, “Bringing the public into local meetings and assemblies about a range of climate resiliency programs, such as green jobs, renewable energy, clean transportation, and climate action plans, is the starting point for developing equitable and just transition strategies to reduce greenhouse gas emissions at the community level.” (p.37)

Since March 2022, the LFP CAC engaged residents via workshops, tabling events, a survey, and more (**Table 1**). Through these interactions, resident voices were brought into this Climate Action Plan.

COMMUNITY SURVEY

The LFP Climate Action Committee created online and paper versions of a 40-question [survey](#) to gather input on LFP community member views, priorities, concerns and ideas related to local climate changes. The Climate Action Committee carried out a campaign to advertise and encourage participation across the LFP community. Key findings from the 466 responses are summarized below. Complete methodology and data from the survey is reported in **Appendix 4: Survey Data**.

Table 1. Key findings of the LFP Climate Action Survey

1	Opportunities. LFP should connect residents to climate issues and opportunities, including promoting existing incentives and subsidies to go electric and through partnerships with neighboring cities, nonprofits, and other LFP commissions. Successful models include the heat pump program of Energysmart eastside .
2	Policy. The LFP city government should be a role model for other small cities and make climate friendly policy changes and decisions collaboratively.
3	Transportation. LFP should improve local infrastructure and advocate for policies at the state level that reduce cars on the road.
4	Education. LFP should keep up to date on and educate residents about cost effective ways to reduce GHG emissions that are the least disruptive to their daily life.
5	Policy and positive change. Empower residents by providing pathways to advocate for climate friendly policy change.

COMMUNITY EVENTS

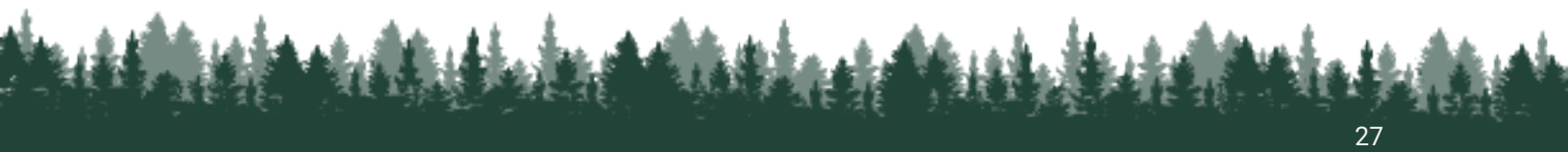
The LFP CAC engaged members of the community through the survey, but also through conversations at community events, educational workshops done in partnership with neighboring cities of Kenmore and Shoreline, and much more (**Table 2** and **Table 3**).

Table 2. Events and activities of the LFP Climate Action Committee since 2022

What	Where	When
Distribution of Community Survey	Throughout LFP	September-December 2022
Launched "LFP in Action" Book Club	LFP Third Place Books	November 2022
Honored: LFP CAC Receives Third Place Commons Friends of the Community Award	LFP Commons	May 25, 2023
Tabled at Green Fair	LFP Commons	April 29, 2023
Tabled at Secret Gardens of Lake Forest Park GardenTour	LFP Commons	June 17, 2023
Tabled at Farmers Market	LFP Farmers Market	July 23, 2023, and October 1, 2023
Tabled at Picnic in the Park	Animal Acres Park	September 2023
Co-hosted workshop: Go electric, Convection Stoves	LFP Commons	July 18, 2023
Co-hosted workshop: Go electric Solar	Kenmore	August 17, 2023
Co-hosted workshop: Go electric, Heat Pumps	Shoreline	September 19, 2023
Attended Tree Board Meetings	LFP City Hall	July 2023
Attended Parks Board Meetings	LFP City Hall	July 2023
Attended Planning Commission Meetings	LFP City Hall	July 23, 2023; November 14, 2023; and January 8, 2024
Hosted the Climate Town Hall with State Legislatures	LFP Common	April 13, 2024

Table 3. *Additional community engagement activities completed by the CAC*

<ul style="list-style-type: none">• Distributed 12 Climate Newsletters to LFP community members to announce above events
<ul style="list-style-type: none">• Created handouts and displays to use at public events, including information on Inflation Reduction Act grants and rebates
<ul style="list-style-type: none">• Wrote and distributed several articles to the Lake Forest Park newsletter lists.
<ul style="list-style-type: none">• Started collaborations with King County north end cities on programs and events for disseminating relevant climate information.
<ul style="list-style-type: none">• Currently there are 123 subscribers to the LFP CAC "Notify Me" list; we expect this to grow as the work of the City becomes more evident.
<ul style="list-style-type: none">• Met with the Shoreline Schools superintendent to discuss the school system’s climate action plan
<ul style="list-style-type: none">• Met with representatives from Seattle City Light to discuss grid reliability and undergrounding.





Section 2: Strategies & Actions

Strategies and Actions

A climate action plan provides a road map for our LFP government and community to address climate change. It provides strategies to reduce GHG emissions and sequester carbon while also preparing communities for climate impacts that cannot be avoided. Implementation of these strategies will lead to investment in adaptations that build community resilience and prioritize fair, equitable, and empowering actions for the most vulnerable communities.



The focus areas, strategies, and actions outlined below for Lake Forest Park align with and draw heavily upon our neighboring cities' plans and are informed by feedback from the LFP community and information from the 2019 King County GHG Emissions Inventory. The vision of the future for each focus area is borrowed from the [Mercer Island Climate Action Plan](#) released in April 2023. Action on these recommendations will put LFP on a path to join other communities in achieving the dual climate goals of mitigation and resiliency.

Mitigation

Mitigating GHG emissions to almost zero over the next 30 years (90% by 2050) through:

- Policy changes for the City to implement within its operations
- Incentives for emission reductions by businesses and households
- Actions and lifestyle changes by residents of Lake Forest Park that reduce or eliminate emissions

Resiliency

Building the resiliency of our community to climate impacts by:

- Assessing and alerting members to climate impacts on Lake Forest Park, with particular attention to vulnerable and overburdened communities.
- Establishing a practice of continual consideration of climate-related issues at the individual, community, and municipal levels.
- Adopting adaptive, proactive strategies for implementing actions in a manner that is just and appropriate for all community members.



Lake Forest Park Climate Action Plan Strategies and Actions

Research by the Climate Action Committee finds five focus areas where the City of Lake Forest Park can take action to address mitigation and resilience goals. We have organized the second section of this plan, our Strategies and Actions, around these five focus areas:



Improvement of the **transportation sector and land use**

Focus Area 1: Transportation & Mobility (TR)



Transformation of **built environments**

Focus Area 2: Built Environment/Land Use (BE)



Protection of our **natural environments, resources, and ecological systems**

Focus Area 3: Natural Environment, Ecosystems, Sequestration (NE)



Management and reduction of **waste and consumption**

Focus Area 4: Consumption and Solid Waste (CW)



Strengthening of **community** to promote adaptations and collaborative culture that will allow all residents to thrive despite climate setbacks

Focus Area 5: Community Resilience & Preparedness (CR)

Lake Forest Park will achieve these Climate Action Plan goals by following strategies and implementing actions in five focus areas, detailed below.



Focus Area 1: Transportation & Mobility

Vision of the future: Low-to-no carbon transportation options are safe, clean, accessible, affordable, and widely used.

Table 4. Transportation and mobility goals and community priorities

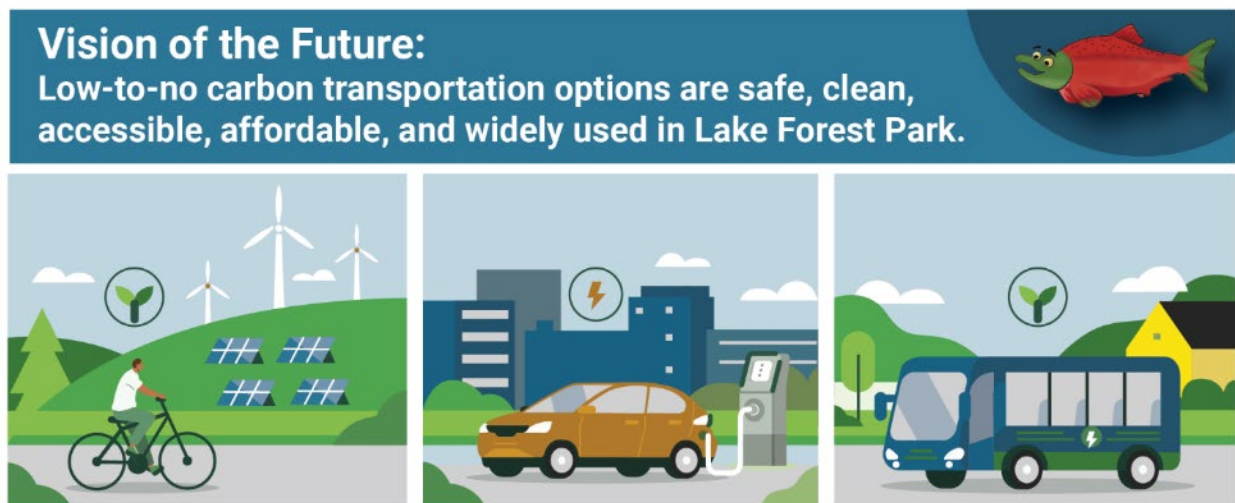
Goal	Community Priorities
<ul style="list-style-type: none">• Reduce GHG emissions from transportation by transitioning to electric vehicles (EV's), expanding shared transportation options, and promoting improvement of cycling and pedestrian networks.• Advocate for greener forms of long distance travel to reduce GHG emissions.• Accelerate the Lake Forest Park Safe Streets program to meet emissions goals.	<ul style="list-style-type: none">• According to survey results, residents are driving less and walking and biking more. They are rethinking air travel, reducing the number of cars in their household, and purchasing or considering purchasing an eclectic vehicle.• Residents are also adopting battery electric and hybrid vehicles (in 2022, 3% of personal passenger vehicles owned by Lake Forest Park residents were battery electric and nearly 6% were hybrid).



According to survey results, in 2020, about 55.2% of Lake Forest Park residents drove alone to their place of employment. An additional 8.8% carpoolled; 8.8% used public transportation; 5.0% walked, biked, or used another means to commute; and 23.2% worked from home.

In the survey, one community respondent stated, “we should bike when we can, we should ride-share as much as possible, we should use the bus and light rail more”.

Figure 6. Low-to-no carbon transportation options in Lake Forest Park



Transportation and Mobility Strategies & Actions

STRATEGY 1: ACCELERATE ELECTRIC VEHICLE (EV) ADOPTION

Table 5. Actions and implementation ideas to accelerate EV adoption

Ref Code	Action	Implementation Ideas
TR 1.1	Electrify the City fleet	<ul style="list-style-type: none"> Develop a transition plan, then increase the number of municipal EVs to 100% by 2035. Purchase and deploy Electric Vehicles (EVs) to transition the City's vehicle fleet to electric by 2035 for all operationally feasible vehicles. As needed, delay purchasing replacement vehicles until EV options are available and affordable. If EVs are not available for necessary replacements, consider plug-in hybrid options. Increase electrical capacity and charging infrastructure at City facilities to ensure adequate capacity for fleet and employee EV charging.
TR 1.2	Eliminate gasoline-powered tools	<ul style="list-style-type: none"> Eliminate and publicize the transition away from gasoline-powered tools. Explore what other jurisdictions have done to eliminate gas-powered tools. Consider a buy-back program for gas-powered tools. Educate the LFP community about the value and availability of the Shoreline tool library.
TR 1.3	Increase charging infrastructure	<ul style="list-style-type: none"> Include language to install charging infrastructure in public facilities within the City's revised Comprehensive Plan. Continue to partner with Bothell, Kenmore, and Shoreline to obtain funding from the state to install charging stations along route 522, at City Hall, on route 104, and in apartments and condominiums. In alignment with regional efforts through WSDOT and Seattle City Light, expand the public EV charging network by assessing gaps and supporting installation of charging stations for public use on business, institutional, City, and utility properties in key areas. Install charging stations for public use at City facilities open to the public such as parks and recreation centers wherever feasible. Require Installation of a minimum number of charging stations in addition to electrical capacity for all new

Lake Forest Park Climate Action Plan Strategies and Actions

Ref Code	Action	Implementation Ideas
		multifamily residential and commercial construction and during major renovation of parking lots/ structures.
TR 1.4	Incentivize EV charging stations	<ul style="list-style-type: none"> Publicize the federal rebates for EV charging stations to LFP businesses and the LFP community. Apply for the federal and state grant for EV charging.
TR 1.5	Community education about Electric Vehicles	<ul style="list-style-type: none"> Provide community education and outreach to increase EV adoption and promote existing incentives for EV purchases.

STRATEGY 2: REDUCE COMMUNITY WIDE DRIVING

Table 6. Actions and implementation ideas to reduce community wide driving

Ref Code	Action	Implementation Ideas
TR 2.1	Review municipal codes for emission reduction	<ul style="list-style-type: none"> Develop a format for an environmental impact note for each piece of legislation.
TR 2.2	Encourage transit-oriented development	<ul style="list-style-type: none"> Study and support transit-oriented development and missing middle housing.
TR 2.3	Develop a pedestrian and bicycle network	<ul style="list-style-type: none"> Increase the network of safe bike lanes, boulevards, and trails; widen sidewalks; expand convenient transit stops; and install effective traffic signals. Partner with public transport services, community organizations, and surrounding jurisdictions to pilot new routes and diverse transit options (including carpooling) to improve efficiency and reliability. Start with strategic areas near schools and commerce. Identify and apply for sources of funding.
TR 2.4	Secure bike storage	<ul style="list-style-type: none"> Develop regulations that require bike lockers at new or major retrofits at town center, multifamily facilities, parks, and municipal facilities. Include bike lockers in the 2024-26 budget.

Lake Forest Park Climate Action Plan Strategies and Actions

Ref Code	Action	Implementation Ideas
TR 2.5	Expand capacity of the LFP Town Center to act as a mobility hub	<ul style="list-style-type: none"> Reexamine the Town Center Zoning to ensure the Town Center becomes a shared-use mobility hub that enhances cross-community travel by transit, ride-share, electric vehicles, bike-share, and scooter-share and any means other than driving a traditional gas/diesel vehicle alone.
TR 2.6	Review flex schedules for municipal employees	<ul style="list-style-type: none"> Review the flex schedule annually to make sure it is working.
TR 2.7	Collaborate with the cities of Shoreline and Kenmore as they adopt shared-use electric bicycle or scooter programs	<ul style="list-style-type: none"> Explore with north-end cities creating a shared bike and scooter program. Partner with community groups to pilot an e-bike library where bikes are available to low-income community members without requiring smartphone technology and a credit card to access.
TR 2.8	Consider reducing air travel	<ul style="list-style-type: none"> Review the travel policy in the City and encourage staff training and professional development to take place locally. Conduct community education on air travel alternatives, opportunities and incentives to electrify; actions being taken at the City, state and federal levels to reduce transportation.

STRATEGY 3: IMPROVE “LAST MILE / FIRST MILE ACCESS”

Table 7. Actions and implementation ideas to improve “first mile/last mile access”

Ref Code	Action	Implementation Ideas
TR 3.1	Build -transit oriented development	<ul style="list-style-type: none"> Uphold the GMA to prioritize dense mixed use TOD and affordable housing and update the comp plan to comply with HB 1110.
TR 3.2	Expand the South Transit jitney service	<ul style="list-style-type: none"> Review the South Transit jitney service in north Lake Forest Park and encourage expansion to south Lake Forest Park.

Lake Forest Park Climate Action Plan Strategies and Actions

Ref Code	Action	Implementation Ideas
TR 3.3	Support pedestrian infrastructure	<ul style="list-style-type: none"> Accelerate and expand safe streets programs and develop a one-way street program.
TR 3.5	Increase transit ridership through education and outreach	<ul style="list-style-type: none"> Collaborate with regional transit authorities to install reader boards and informational kiosks and use city website to better inform the community about transit options and apps.
TR 3.6	Support city trail system	<ul style="list-style-type: none"> Accelerate Green Infrastructure program



Focus Area 2: Built Environment/Land Use

Vision of the future: Residents live and work in energy efficient buildings powered by clean, renewable energy.

Table 8. Built environment/land use goals and community priorities

Goal	Community Priorities
<ul style="list-style-type: none"> • Reduce GHG emissions from buildings by reducing energy usage, electrifying buildings, and transitioning to clean and reliable renewable energy sources. • Eliminate natural gas usage in LFP. Emissions from buildings represent 22% of total LFP GHG emissions and most of this comes from natural gas. • Expand and incentive solar panels. As of January 2024, the only retail, commercial, or multi-family housing unit that has installed solar panels is the King County 	<ul style="list-style-type: none"> • Residents want to reduce their emissions but are concerned about becoming more vulnerable to weather related events by relying only on electric. They will be looking to the City to provide solutions to some of these issues. • One community respondent answered on the survey that the City government should install charging stations in front of city hall, and solar panels on roof of city hall". Another respondent stated that the City should "partner with the school district to educate students and families

Lake Forest Park Climate Action Plan
Strategies and Actions

Goal	Community Priorities
Housing Authority (this system likely provides about 9- to 10% of the total solar energy generated within the City).	about how they can reduce their carbon footprint at school (recycle, walk to school, carpool, compost at lunch, etc.). The next generation is worried and needs to see their city take action.



One resident on our survey asked, “If the City requires homes to be all electric - what obligation does the City have to make sure the power grid works? In case you haven't noticed - it hasn't worked very well over this winter. My gas-powered home had hot water and the ability to cook during those times. If it was all-electric - I guess I would have just sat here shivering? You can't dictate that people use one source of heat/cool/etc. and then not have that actually work - that's irresponsible.”

Strategies and Actions for Built Environment/Land Use

STRATEGY 1: USE CLEANER ENERGY

Table 9. Action and implementation ideas to use cleaner energy

Ref Code	Action	Implementation Ideas
BE 1.1	Encourage a transition from gas to electric and solar energy	<ul style="list-style-type: none"> Incentivize a full transition to either electric or solar energy in existing commercial and residential buildings.
BE 1.2	Encourage enrollment in Seattle City Light's Green Up program	<ul style="list-style-type: none"> Encourage businesses, large energy users, and residents to enroll in Seattle City Light's Green Up program to expand the use of green energy.
BE 1.3	Support community solar projects	<ul style="list-style-type: none"> Add a community solar program to the legislative agenda of the City . Use incentives and partnerships to support the development of local community solar projects and micro-grids that provide alternative energy sources for critical community facilities, especially during brownouts or unexpected power loss.
BE 1.4	Enact code requiring electrification	<ul style="list-style-type: none"> Enact code to phase out fossil fuel infrastructure in new construction.
BE 1.5	Advocate for increased electricity grid reliability	<ul style="list-style-type: none"> Encourage local utilities to update regulations that increase the flexibility of the electricity grid and incentivizes large-scale energy customers to reduce their electricity use during peak times.
BE 1-6	Inform and educate about green infrastructure	<ul style="list-style-type: none"> Provide information about green infrastructure programs such as green roofs, thermostat technology and passive heating.

STRATEGY 2: BUILD STRATEGICALLY FOR LESS ENERGY AND CLEAN ENERGY

Table 10. Action and implementation ideas to build strategically for less energy and clean energy

Ref Code	Action	Implementation Ideas
BE 2.1	Increase incentives for infrastructure adaptation improvements	<ul style="list-style-type: none"> • Increase incentives and promotion of green stormwater infrastructure and urban forests on developed properties, with emphasis on areas prone to urban heat islands, flooding, and identified environmental health disparities.
BE 2.2	Develop green building regulations	<ul style="list-style-type: none"> • Require new and retrofitted multifamily housing to have EV charging stations. • Restrict the addition of new gas lines and installations in residential and multifamily zones.
BE 2.3	Integrate environmental justice criteria within land use decisions	<ul style="list-style-type: none"> • Incorporate environmental justice criteria and priorities into zoning, land use planning, permitting policies, and development of new projects. • In collaboration with utilities and local jurisdictions, develop a residential home energy program to provide education, technical assistance, and financial assistance to replace gas and oil heating systems with electric heat pumps, improve home efficiency, and install renewable energy systems. Options include a rebate program, bulk-purchase retrofit campaign, or other financing mechanism. Prioritize low- and middle-income households for assistance and incentives.
BE 2.4	Prioritize dense, mixed use, transit-oriented developments and affordable housing	<ul style="list-style-type: none"> • Uphold the Growth Management Act and HB 1110 to prioritize dense, mixed use, transit-oriented development (TOD) and affordable housing.



Focus Area 3: Natural Environment, Ecosystems, Sequestration

Vision of the future: The community protects, conserves, and restores our natural systems, landscapes, and habitats.

Table 11. Natural environment, ecosystems, and sequestration goals and community priorities

Goal	Community Priorities
<ul style="list-style-type: none">Foster climate-resilient natural landscapes by restoring natural systems, protecting vital habitats and ecosystems, and conserving water resources.Sequester carbon while restoring and enhancing trees and waterways.Protect Lake Forest Park’s unique resources, including its large tree canopy (50%), undeveloped watersheds (12%), and other natural ecosystems.	<ul style="list-style-type: none">Residents value our canopy and ecosystems and seek to retain them as natural resources and community assets.One community resident responded in the survey, “We see many stressed, dying, and dead trees in the neighborhood. When we lose our canopy, the understory suffers as well. I feel we are in danger of irreversibly and negatively impacting the area, and with loss of trees and other



Goal	Community Priorities
<ul style="list-style-type: none"> Maintain interconnected benefits and services of natural systems, such as improving mental health, offering recreational opportunities, acting as natural cooling areas during heat waves, and providing habitat for local wildlife. Climate change strategies that focus on reducing emissions from transportation and supporting dense, walkable, transit-oriented development, should also work to protect and increase our existing urban tree canopy and restore and protect waterways to make the City of LFP climate resilient. The actions in this section enhance our efforts to protect tree canopy and waterways. 	plant life, the region's temperatures will soar higher."

More information on tree canopy and climate change resilience and urban watersheds and climate change resilience is available in **Appendix 6: Natural Systems**.

Strategies and Actions for Natural Environment, Ecosystems, Sequestration

STRATEGY 1: MAINTAIN HEALTHY URBAN FOREST

Table 12. Actions and implementation ideas to maintain healthy urban forests

Ref Code	Action	Implementation Ideas
NE 1.1	Implement policy and practices for sustaining tree canopy	<ul style="list-style-type: none"> Support the Tree Board's policy and strategies to protect large-stature species with dense wood, identify the most effective carbon-capturing trees, and develop a plan for maintaining tree canopy in perpetuity. Adopt planning and funding programs for urban dense vegetative growth programs such as Miyawaki Forests.
NE 1.2	Incentivize climate-conscious tree planting	<ul style="list-style-type: none"> Review city policy and ordinances for planting trees around buildings to promote energy efficiency, enlarge and improve planting sites with tree longevity in mind, increase stormwater infiltration, and include trees in street improvement projects. Implement a city open space project to plant a diverse mix of pest-tolerant, well-adapted, low-maintenance, long-lived, and drought-resistant trees to ensure greater

Lake Forest Park Climate Action Plan Strategies and Actions

Ref Code	Action	Implementation Ideas
		resilience, while planting small groves of especially water-tolerant species in areas receiving peak volumes of stormwater runoff to reduce flooding and pollutant transport.
NE 1.3	Allocate resources for urban tree maintenance	<ul style="list-style-type: none"> Require new developments to maintain new tree planting for 5 years. Provide information on how to plant and care for new plantings. Require the City to establish and adhere to a regular tree maintenance cycle with an eye towards helping protect cities and infrastructure from extreme weather events.
NE 1.4	Address tree canopy cover inequity	<ul style="list-style-type: none"> Supporting the Tree Board expansion of tree cover is an opportunity to address inequitable access to trees and green space.
NE 1.5	Conduct outreach and education on forest conservation strategies	<ul style="list-style-type: none"> Support the efforts of nonprofits to educate and engage residents on tree retention and health and the value of trees as a mitigating strategy for climate change.

STRATEGY 2: INCREASE CARBON SEQUESTRATION

Table 13. Actions and implementation ideas to increase carbon sequestration

Ref Code	Action	Implementation Ideas
NE 2.1	Evaluate municipal parks for greater carbon sequestration	<ul style="list-style-type: none"> Support community organizations, nonprofits and the Parks Board to implement a plan to re-evaluate existing parks and other existing green areas for carbon sequestering sinks.
NE 2.2	Evaluate open spaces for greater carbon sequestration	<ul style="list-style-type: none"> Support nonprofits, community-based organizations, and the Planning Department to implement a plan to re-wild unused areas by converting impervious surfaces into permeable habitats.

STRATEGY 3: MAINTAIN HEALTHY WATERWAYS

Table 14. Actions and implementation ideas to maintain healthy waterways

Ref Code	Action	Implementation Ideas
NE 3.1	Recognize and protect all waterways	<ul style="list-style-type: none"> Review and revise existing codes and ordinances to enhance protection by widening buffer zones even for minor streams. Coordinate with neighboring jurisdictions, cities, water districts, sewer districts, and other key partners to identify and seek state and federal funding to develop a plan to reroute the sewer system so it is out of the streams and a short-term plan to reline the sewer system to enhance reliability.
NE 3.2	Safeguard our water supply	<ul style="list-style-type: none"> Host four water districts to discuss and plan for safeguarding supply, encouraging conservation and reusable water containers.
NE 3.3	Reduce the impact of runoff	<ul style="list-style-type: none"> Review and revise building codes for new or redevelopments to require onsite stormwater control measures (SCM). (Examples of SCMs are rainwater tanks, infiltration systems that receive overflow from tanks and impervious surfaces, and biofiltration systems, rain gardens, etc.).
NE 3.4	Restore water ways to enhance natural flow	<ul style="list-style-type: none"> Work with federal and state agencies, neighboring jurisdictions, community-based organizations, and nonprofits to fund the removal of any impediments (concrete channels, rip-rap, culverts, etc.) to the natural flows of streams.
NE 3.5	Maintain riparian environments	<ul style="list-style-type: none"> Work with community-based organizations and nonprofits to secure funding to work with community groups to remove invasive species. Review guidelines for native plantings for the riparian environment.
NE 3.6	Restore degraded stream beds	<ul style="list-style-type: none"> Work with federal and state agencies and nonprofits to fund restoration of hyporheic zones of streams in heavily impacted areas. Research and consider re-seeding healthy benthic invertebrates into restored areas.

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Ref Code	Action	Implementation Ideas
NE 3.7	Reintroduce native kokanee salmonid populations (<i>Oncorhynchus nerka</i>)	<ul style="list-style-type: none">• Support community-based organizations, nonprofits and residents for reintroduction programs facilitated by the Washington Department of Fish and Wildlife and Washington Department of Ecology.





Focus Area 4: Consumption and Solid Waste



Vision of the future: The community practices circular economy principles, reducing resources used, reusing and repurposing materials, and recycling and composting almost all of what is left.

Table 15. Consumption and solid waste goals and community priorities

Goal	Community Priorities
<ul style="list-style-type: none">• Reduce waste and the GHG emissions associated with the consumption and disposal of goods and materials.• Solid waste disposal and wastewater treatment account for 2% of communitywide GHG emissions. Consuming products also creates upstream emissions from the energy and fuel used to produce and distribute goods and materials.	<ul style="list-style-type: none">• Increase effective recycling and composting in residential and businesses and demonstrate the link to climate change. One community resident responded to the survey that we should “recycle and compost heavily, use washable towels in place of paper towels, reusable bags, and limit use of plastic”.

Goal	Community Priorities
<ul style="list-style-type: none">In addition to reducing emissions, waste prevention and diversion can also reduce pollution and litter. Sustainable consumption, in turn, supports Lake Forest Park businesses by promoting local goods.	



Strategies and Actions for Consumption & Solid Waste

STRATEGY 1: IMPLEMENT CIRCULAR ECONOMY IN CITY OPERATIONS

Table 16. Actions and implementation ideas to implement circular economy

Ref Code	Action	Implementation Ideas
CW 1.1	Reduce municipal purchase of paper	<ul style="list-style-type: none"> Switch to digital whenever possible for both internal use and external uses, such as public meetings.
CW 1.2	Investigate resource-sharing across municipalities	<ul style="list-style-type: none"> Host a north-end cities meeting to plan for the use of shared resources such as vehicles, equipment, and cost saving ideas.
CW 1.3	Develop Environmentally Preferable Purchasing Policy	<ul style="list-style-type: none"> Use existing examples of purchasing policies, such as the federal environmental preferable purchasing policy, to develop a LFP purchasing policy for products or services that have a reduced effect on human health and the environment.

STRATEGY 2: PREVENT WASTE

Table 17. Actions and implementations to prevent waste

Ref Code	Action	Implementation Ideas
CW 2.1	Support sustainable local food economy	<ul style="list-style-type: none"> Support food assistance programs in partnership with the Farmers Market Join the John Hopkins meatless Monday campaign and publicize it to residents.
CW 2.2	Promote educational programs on waste prevention	<ul style="list-style-type: none"> Revise the format of the newsletters to have a “climate corner”; distribute information and meal ideas through various city-sponsored media outlets, support the master Gardeners Program and their efforts to encourage home food growing. Require Republic to upgrade their community outreach on what goes where in commercial venues and expand education on household recycling.

STRATEGY 3: REDUCE INPUT TO LANDFILLS

Table 18. Actions and implementations to reduce input to landfills

Ref Code	Action	Implementation Ideas
CW 3.1	Mandate recycling and composting	<ul style="list-style-type: none"> Revise solid waste contract to require evidence that businesses and restaurants are effectively recycling and composting and that haulers are documenting diversion rates.
CW 3.2	Conduct education about zero waste programs	<ul style="list-style-type: none"> Promote alternatives to single-use materials. Promote buy nothing and secondhand sales. Support community-based organizations and nonprofit organizations efforts to recycle more and use less plastic and recycle lithium batteries.
CW 3.3	Educate Community on waste sorting	<ul style="list-style-type: none"> Develop programs and signage to educate community on what is recyclable and compostable, and what is not.



Focus Area 5: Community Resilience & Preparedness

Vision of the future: People and ecosystems are healthy, thriving, and can respond and adapt to climate change.

Table 19. Community resilience and preparedness goals and community priorities

Goal	Community Priorities
<ul style="list-style-type: none">• Ensure that all Lake Forest Park residents are prepared for current and future climate impacts.• Increasing community resilience—the community’s ability to adapt and respond to unavoidable climate impacts—is a necessary part of effective climate action. We will center vulnerable and overburdened communities as we communicate and build resilience. We will work to clearly define goals and ways	<ul style="list-style-type: none">• Climate change is happening at a fast pace with far-reaching effects. In our survey, one community respondent stated, “this will take an extraordinary cultural/paradigm shift at all levels (individual to global systems). A gradual rebuild of society in order for all the interconnected systems to be healthy is the only solution.”



Goal	Community Priorities
partnerships between individuals, communities, and the City to attain those goals.	

Strategies and Actions for Community Resilience & Preparedness

STRATEGY 1: PREPARE FOR CLIMATE EMERGENCIES

Table 20. Actions and implementation ideas to prepare for climate emergencies

Ref Code	Action	Implementation Ideas
CR 1.1	Hire a Climate Action Plan Program Manager	<ul style="list-style-type: none"> Hiring a Climate Action Plan Program Manager is necessary to oversee the implementation of the LFP CAP.
CR 1.2	Create a resilience and energy subsidy information center	<ul style="list-style-type: none"> Create and maintain a central resource on the City website, where federal and state incentives are posted and updated.
CR 1.3	Increase resilience hubs	<ul style="list-style-type: none"> In partnership with local agencies, neighboring cities and organizations, identify buildings or rooms to use as resilience hubs, for electricity, public heating and cooling centers. Publicize these locations through regular and routine outreach to residents.
CR 1.4	Create audience specific communication strategies	<ul style="list-style-type: none"> Co-create climate communications with communities and organizations —especially youth organizations —on climate and health impacts and emergency resources and warnings during extreme events. Create a neighborhood and youth ambassador program to train and give people the tools and resources to work with their peers to implement many of the actions identified in this plan. Reach out to adult care facilities and collaborate with senior centers to disseminate information on climate and health impacts, emergency resources, and warnings during extreme events.

Lake Forest Park Climate Action Plan Strategies and Actions

Ref Code	Action	Implementation Ideas
		<ul style="list-style-type: none"> Create communication materials for non-English speaking communities.
CR 1.5	Create a climate emergency management education program	<ul style="list-style-type: none"> Collaborate with emergency management staff to provide community-based education and engagement activities each year to increase awareness of climate impacts and opportunities for action. Provide free or discounted air filter box fans to vulnerable community members.
CR 1.6	Educate residents about Northshore Emergency Management Coalition (NEMCO)	<ul style="list-style-type: none"> Support NEMCO efforts to provide information and facilities to deal with extreme weather and plans for respite locations from the impacts of heat, cold, flooding, (e.g., cooling stations and emergency housing plans).

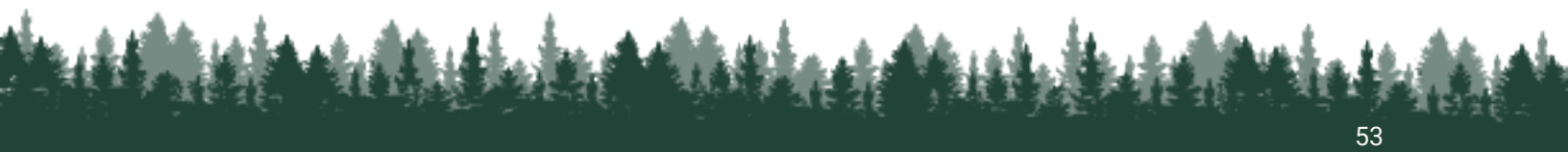
STRATEGY 2: INCREASE ADAPTIVE CAPACITY AND RESILIENCE

Table 21. Actions and implementation ideas to increase adaptive capacity and resilience

Ref Code	Action	Implementation Ideas
CR 2.1	Mitigate impacts of green gentrification	<ul style="list-style-type: none"> Mitigate impacts of green gentrification by pursuing community centered anti-displacement strategies (e.g., eviction prevention and cash assistance) and expanding access to affordable housing resources such as home ownership strategies and climate-related home improvements.
CR 2.2	Utilize Washington State Department of Transportation (WSDOT)'s vulnerability assessment information	<ul style="list-style-type: none"> Identify potential climate vulnerabilities (e.g., flood prone roads, landslides areas, canopy areas especially vulnerable to climate change) and assist impacted residents to create an individualized emergency action plan.
CR 2.3	Provide environmental mini grants	<ul style="list-style-type: none"> Provide mini grants for community climate projects, perhaps in partnership with Kenmore and Shoreline. Consider funding projects that either reduce GHG emissions or build community climate resilience and provide highest funding levels for community-driven projects.

Lake Forest Park Climate Action Plan
Strategies and Actions

Ref Code	Action	Implementation Ideas
CR 2.4	Facilitate multi-jurisdictional collaboration	<ul style="list-style-type: none">Continue to collaborate with nearby municipalities on ways to empower our constituents to reduce their carbon footprint and to proactively plan for climate impacts.





Section 3: Implementation Plan

Implementation Plan

Overview

When implemented, the strategies and actions outlined above will move us toward a low-emissions, resilient Lake Forest Park. The Climate Action Committee worked to gather input from the LFP community and have worked to incorporate equity considerations into the action plan.

A strong implementation plan will include the identification of a timeline, estimated costs, lead departments, community partners (e.g., public utilities, King County Library System (KCLS), Shoreline School District, neighboring cities, Rotary), and more (current actions, existing legislative processes, etc.) for each action outlined above. It will also require a defined process for accountability.

To successfully implement the LFP Climate Action Plan, the CAC recommends that the City hire a full time staff member to lead implementation. The urgency of action on climate change and of designing an implementation plan and acting on that plan, argue for bringing in a full-time paid professional staff member for LFP. Climate Staff/Managers in Shoreline and Kenmore are working with the LFP Climate Action Committee on outreach and educational events, and their positions can be models for the role of a similar hire in LFP.

The effective impacts from our efforts, measured in achievement of specific GHG reduction targets specified in the implementation plan and greater community resilience, will require coordination and cooperation between the City government, the LFP Climate Action Committee, and the LFP community. Guidance for a hiring committee in the form of potential interview questions for such a position are given in **Appendix 7: Hiring Committee Guidance for a city Climate Action Plan Program Manager**.

Equity Considerations

Implementation of the CAP will rely on continued leadership from the City and the CAC, continued engagement with the LFP community, and the ongoing collective action from LFP residents and businesses. Here are some guiding questions that can be used in implementation:

- **Disproportionate impacts.** Does the action generate burdens (including costs), either directly or indirectly, to communities of color or low-income populations? If yes, how can we mitigate these impacts?
- **Shared benefits.** Can we target the action's benefits in progressive ways to reduce historical or current disparities? Are the benefits dispersed equitably?
- **Accessibility.** Are the action's benefits broadly accessible to households and businesses throughout the community—particularly communities of color, vulnerable and low-income populations, and businesses owned by women, people of color, and emerging small businesses?

- **Alignment and partnership.** Does the action align with and support existing priorities of communities of color and low-income populations? Are there opportunities to leverage resources and build collaborative partnerships?
- **Accountability.** Does the action have appropriate accountability mechanisms to ensure that communities of color, low-income populations, or vulnerable communities will equitably benefit and not be disproportionately harmed?

Climate Action Plan Program Manager

Under the general supervision of the LFP City Administrator, the Climate Action Plan Program Manager will be responsible for implementing the City's Climate Action Plan (CAP) to achieve the City's GHG emission reduction targets and to ensure the development of community resilience to extreme climate and weather events. The Climate Action Plan Program Manager will coordinate across all City departments and the community and monitor and evaluate the City's progress towards meeting climate goals.

The manager's responsibilities will include:

- Oversight and accountability of meeting LFP climate goals.
- Formation of partnerships with government partners and nonprofit and community-based organizations to advance emission reduction.
- Pursue grants and partnership opportunities to support implementation of CAP actions. Includes identification of/application for state and federal grants.
- Annual reporting to the City Council, Climate Action Committee and community on implementation, challenges, and overall progress on meeting GHG reduction goals.
- Develop budget and work plan recommendations for City Council consideration each biennium to support CAP recommended actions. Management of allocated budgets.
- Identify CAP-related advocacy items for inclusion in the City's annual legislative priorities.
- Create community resources, update the web, and write articles and newsletters.
- Ensure equitable implementation and access to resources for all residents

The Role of the LFP City Government

Vision: Community members and City government are informed and active in local climate action and work together to meet emission reduction targets.

The City of Lake Forest Park must provide leadership in eliminating GHG emissions, mitigating impacts, and building a resilient city. An example of leadership: the community needs an information hub, a place for citizens to find up to date information, including on rebates. The City will continue to lead and coordinate implementation of the actions and strategies identified within the CAP.

City operations that produce GHG emissions include fleet vehicles, employee commutes, electricity to power municipal operations, and gas used in power tools. The City can adopt actions that reduce emissions and increase community resilience while also acting as a model and resource for LFP residents. This section provides specific strategies and associated actions that can be taken by the city government that create regulations that generate a sustainable future by eliminating GHG's in government operations and in transit, enhancing our natural resources, and ensuring our residents reduce consumption and build resilience to climate change.

The City will prioritize adoption of actions to eliminate municipal GHG emissions and integrate climate considerations into city reporting and decision-making while increasing community awareness and empowering community resilience to climate changes.

The Role of the LFP Climate Action Committee

The CAC was formed to represent the diversity of the community and with three year terms to provide opportunities for interested citizens to participate and allow new voices to be heard. The CAC will continue to serve the LFP City Council and LFP Community. In the next phase, the role of the CAC, in collaboration with the City Council, will be to:

- Collaborate with the Mayor, City Council and City Administration on the best ways to reduce emissions.
- Provide outreach to the community, acting as a liaison between the City and the residents of LFP (e.g., tabling at community events).
- Create and host workshops and other events in partnership with neighboring cities.
- Write articles for newsletters, Instagram, Facebook and other sources.
- Continue to be partners in implementation of the climate action plan.
- Develop model climate-related legislation for the City to be presented to the City Council for consideration.

The Role of the Community and Individual

Role of the Community

Community support and participation are key to achieving community-wide emission reduction and climate resilience goals. The City will continue to proactively seek community input on implementation of the actions and strategies to ensure equity and reflect the unique needs of the LFP community. Throughout implementation of the strategies and actions, the CAC and LFP staff will continue to engage LFP community members in decision-making processes. Ongoing community engagement will be a critical to support all the strategies and actions identified in Section 2 and will be an essential element for the actions in **Table 22**.

Table 22. Actions with essential community engagement components



Transportation and Mobility

TR 1.5 Community education about electric vehicles

TR 2.2 Encourage transit-oriented development

TR 2.5 Expand capacity of the LFP Town Center to act as a mobility hub



Built Environment / Land Use

BE 1.1 Encourage a transition from gas to electric or solar energy

BE 2.3 Integrate environmental justice criteria within land use decisions

BE 2.4 Prioritize dense, mixed use, transit-oriented developments and affordable housing



Natural Environment, Ecosystems, and Sequestration

NE 1.4 Address tree canopy inequity

NE 1.5 Conduct outreach and education on forest conservation strategies

NE 3.2 Safeguard our water supply



Consumption and Solid Waste

CW 2.1 Support sustainable local food economy

CW 2.2 Promote educational programs on waste prevention

CW 3.2 Conduct education about zero waste programs



Community Resilience and Preparedness

CR 1.2 Create a resilience and energy subsidy information center

CR 1.3 Increase resilience hubs

CR 2.1 Mitigate impacts of green gentrification

Lake Forest Park Climate Action Plan Implementation Plan

Community members can support CAP implementation in a variety of ways by participating in the process, including by:

- Staying informed about climate change and resilience and sharing opportunities to reduce personal GHG emissions and help implement the CAP with friends, family, and neighbors.
- Volunteering to help with education and outreach and implementing specific actions suggested here.
- Advocating for funding for converting energy systems in our homes and buildings, redesigning our transportation systems, and more by engaging with local, regional, state and federal representatives.

Lake Forest Park and neighboring communities are starting to become actively involved and taking action related to reducing emissions and preparing for changes to come.

Individual actions and those done in conjunction with neighbors and friends are key to our community's ability to come together in our work towards a climate changed future. Specific actions we can do now as the implementation plan is finalized are listed below. **Appendix 1: Past and Present Actions Implemented in LFP** is intended to be a living document that will become part of the information hub and/or available through the City's website, maintained by the LFP CAC.

Individual Actions

To support implementation of the CAP, the City of LFP asks the LFP community to think about both climate change mitigation and resilience. Consider engaging with friends, family, and neighbors to:

- Learn about climate change and new building and energy options
- Talk about climate change and new building and energy options
- Pursue civics learning sessions/field trips, e.g., where does our water come from? Where is our water treated? Where does our waste go? How/where is hydropower made? What are other renewable energy resources in our state?

Implementing individual actions to address climate change may vary across the LFP community, recognizing that each LFP community member has access to varying resources, knowledge, and expertise. Some specific actions that community members can take to increase climate resilience include:

TRANSPORTATION

- Walk, scooter or bike for short range
- Use public transportation, carpooling and trains when possible
- Telecommute, if possible
- Reduce air travel and/or use carbon offsets



HOUSEHOLD/BUILT ENVIRONMENT

- Plan for purchase of electric tools, vehicles
- Join a tool library
- Wash clothes in cold water, air dry on clothesline
- Get ready to replace appliances with energy efficient models (Energy star rated) and prepare for home upgrades with reduced energy requirements
- Update to Energy Star fixtures

CONSUMPTION/LAND USE

- Plant trees in town center parking lots
- Reduce meat and dairy consumption
- Recycle and compost more
- Plant native species
- Garden, grow your own food, get a pea patch
- Purchase and sell clothing from consignment stores
- Reduce food waste
- Shop locally
- Join the King County Library System for books and other media
- Bring your own reusable cup/water bottle, cutlery

PROTECT THE ENVIRONMENT

- Volunteer with local environmental groups
- Reduce use of pesticides and fertilizers
- Build [Miyawaki forests](#) in LFP, similar in strategy to the one built at the Shoreline Historical Museum
- Encourage stream restoration on private and public property

ADAPT

- Get or make an air purifier
- Prepare household and car emergency kits
- Support and volunteer at Shoreline Tool Library
- Facilitate or join workshops (e.g., [Climate Fresk](#)) and book clubs



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Appendices



Appendix 1: Past and Present Actions Implemented in LFP

The City of Lake Forest Park has some experience with planning for the environment. For example, the city was among the first cities to use integrated pest management on public property. The City's first Climate Action Plan was developed in 2008. The city purchased hybrid vehicles for the police department. The Climate Action Committee is encouraging the City to increase its efforts to meet the GHG emissions goals.

PART A. Past Actions to Reduce GHG

2008: The first formal action of the City of Lake Forest Park to address climate change was a [climate action plan](#) written for the City of Lake Forest Park by Emily M. Templin at the University of Washington Evans School of Government. It focused on city actions to reduce GHG emissions. The 2008 recession limited action taken by the city. Two important products that came from this were are:

- Completed a municipal and community greenhouse gas (GHG) emission inventory
- Developed a suite of potential greenhouse gas reducing actions at the community and municipal level.¹

2019: Lake Forest Park City Council voted to join the [King County Cities Climate Collaborative \(K4C\)](#) in 2019, thus committing to reduce city-produced greenhouse gas emissions to 50% of 2007 levels by 2030 and 95% by 2050.

June 2022: Lake Forest Park City Council unanimously voted to create The LFP Climate Action Committee of 11 residents with the specification that 2 would be students, and all would be confirmed by LFP City Council. The committee's mission was to design a Climate Action Plan guiding the city towards equitable actions to fulfill its commitment of rapid GHG reduction and to increase community resilience to climate change impacts.

2008-2023 Since the first Climate Action Plan in 2008 through the present, the City has implemented:

- **Lights out** City Hall lights are almost all LED. The conversion of remaining lighting is scheduled. Many of the rooms have motion sensors that turn off the lights if there is no activity in the room.
- **Computers off** The City established a practice that computers automatically go into energy saving mode when not in use.

¹ Lake Forest Park Preliminary Greenhouse Gas Inventory and Proposed Climate Action Plan, *Emily M. Templin*, page 6

Appendix 1: Past and Present Actions Implemented in LFP

- **HVAC (heating, ventilation, and air conditioning systems) Maintenance** The HVAC systems are regularly maintained and upgraded. HEPA filters that filter out dust, pollen mold, bacteria and airborne particles have been installed.
- **Appliance replacement** The appliances are certified as Energy Star efficient.
- **Solar Panel Installation** Municipal sites are being investigated for the potential installation of solar panels.
- **Electrical Conversions** City has plans to purchase its first electric vehicle in 2024. Landscaping equipment is being transitioned to battery-powered (blowers, mowers, chainsaws, etc.).
- **Alternative Transport Incentives for government employees** In addition to Bike to work Month implemented each May since 2009, the City has instituted work from home policies.
- **Expansion of Recycling Programs** – The City recycles LDPE plastic within City Hall Compost bins have been added in meeting rooms, kitchen, and bathrooms. Battery recycling for the public is available at City Hall.
- **Environmental Purchasing Program** The City has instituted a practice on food service containers. The city shall not provide, purchase or use non compostable food service containers, straws, lids, and utensils at any city facility or city-sponsored event. All parties who contract with the city shall be prohibited from using non compostable food service containers, straws, lids, and utensils in city facilities or on city-funded projects within the city. (Ord. 1224 § 2, 2021; Ord. 1181 § 1, 2018)
- **Going Digital** The City Council has shifted from providing paper Council packets to purchasing portable computers and providing electronic versions of packet materials. City departments have shifted toward digital systems and have gone paperless where feasible.

PART B. Current Opportunities for Coordination with other LFP efforts

List/describe Other existing LFP City Planning efforts, citywide strategic initiatives, and committees/organizations with efforts that are synergistic with our focus of mitigating emissions and adapting our community and environment to climate impacts.

EXAMINE THE MUNICIPAL CODE:

City of LFP Adopted provisions – e.g., building codes, environmental protection, planning and land use (What regulations have been passed that support climate safety/preparation/protection/emissions?)

- Tree Ordinance
- Land Use Ordinances
- Storm water runoff ordinances
- Water Quality ordinances
- Compost/recycling/solid waste management/landscaping
- Initiatives/Agendas/legislative priorities – e.g., culverts, stormwater management, transportation...
- Stewardship committee
- Parks committee
- Planning commission

Appendix 2: K4C database – City Operations

Puget Sound Regional Emissions Analysis Project - Geographic GHG Inventory Database - Sept 2022

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Paste Cut Copy Format painter Get data Excel OneLake data SQL Enter Datawarehouse Recent sources Transform Refr data Queries

Clipboard Data

Total Emissions by Jurisdiction (MTCO2e)

Activity_Type	Lake Forest Park
Built Environment	22,501
Electricity	451
Commercial	0
Industrial	0
Residential	451
Natural gas	19,349
Commercial	2,035
Industrial	0
Residential	17,314
Other sources	2,700
Fuel oil	2,076
Residential propane	624
Refrigerants	7,048
Refrigerants	7,048
Solid Waste & Wastewater	1,755
Solid waste generation and disposal	1,755
Compost	437
Landfill	1,318
Transportation & Other Mobile Sources	68,787
Aviation	31,908
	31,908
Off-road equipment	6,049
	6,049
On-road vehicles	30,829
Freight and service vehicles	1,836
Passenger vehicles	28,993
Total	100,091

Page 3 of 10

Total By Sector Total by Jurisdiction Total by Jurisdiction - Table

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Puget Sound Regional Emissions Analysis Project
<https://your.kingcounty.gov/dnrp/climate/documents/puget-sound-regional-emissions-project-summary.pdf>

Appendix 3: Regulations

Regulations enacted at federal, state, and regional levels that will affect implementation

(info below comes from [Burien CAP](#), reference if this info is used in this section)

- Washington's Climate Commitment Act, which places an economy-wide cap on carbon to meet state GHG reduction targets and remain consistent with best available science, while minimizing the use of offsets. It works in concert with the state's Health Environment for All (HEAL) Act to assess environmental justice (EJ) impacts and direct 35-40% of investments to overburdened communities. The HEAL Act defines EJ in state law and embeds it in state agency work including engagement, budgeting, funding, and strategic planning. Among its requirements are that 40% of investments in climate-related actions be directed to overburdened communities.
- Washington's Clean Energy Transformation Act (CETA) requires a phase-out of coal by 2025, carbon-neutral electricity sales by 2030, and 100% clean energy by 2045. Utilities are the primary implementer of CETA.
- The Washington State Clean Buildings Act establishes a state energy performance standard, natural gas conservation standard, and other measures for new and existing large buildings over 50,000 square feet with an early adopter incentive program. It also directs the State Building Code Council to develop, by 2021, rules requiring EV charging capability at all new buildings with on-site parking. The greater of one space or 10% of spaces must be provided. In 2021, the legislature passed HB 1287 extending these requirements, by rule, to new single-family construction by 2024. HB 1287 also requires the Washington Department of Transportation to develop and maintain a publicly available mapping and forecasting tool with information regarding the location of EV charging infrastructure.
- Washington's Clean Fuel Standard reduces the overall carbon intensity of fuels by requiring a 20% reduction in the carbon intensity of transportation fuels by 2038, using cleaner fuels or purchasing clean fuel credits. Boats, trains, aircraft, and military vehicles, and equipment are excluded. Other legislation supports the Clean Fuel Standard. For example, SB 5811 allows Washington to adopt and implement California's stringent vehicle emissions standards. SB 5000 establishes a pilot program to exempt new and qualifying used fuel-cell-powered EVs from the sales and use tax between the years 2022–2030 (Burien Climate Advisory Group 2021).

Appendix 4: Survey Data

The online and paper survey including both multiple choice and short answer formats was distributed via 39 unique locations including local Facebook groups, the LFP Sunday Farmer's Market, the City newsletter, Shoreline Area news, Next Door, every city board and commission, organizations located in LFP such as Rotary, the garden club and Stewardship Foundation. It was distributed to condos and rentals through the business offices, and to schools through PTAs and environmental clubs. Neighborhood associations distributed the link to their members. The survey received a total of 446 responses.

Summary Findings

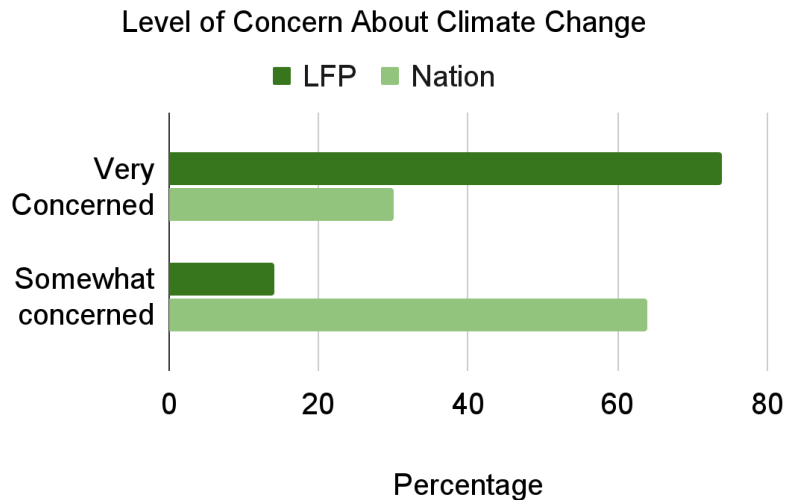
- The LFP community cares very much about climate change (Figure 1).
- LFP should partner with neighboring cities as we address climate issues (such as Energysmart eastside).
- Individuals in the community gather climate information from many different sources.
- Residents need support, e.g. information, subsidies and role models, to ease the path to adapting to rapid transformations in transportation, energy and infrastructure. Sacrifices and tradeoffs at all levels are needed and education and outreach can help.
- Respondents shared ideas to inform education and outreach efforts.



Current Attitudes and Practices of LFP residents

THE COMMUNITY CARES VERY MUCH ABOUT CLIMATE CHANGE.

Figure 1: Our LFP survey asked residents “How concerned are you about climate change?” a question directly comparable to one asked by Yale Climate Communications, who surveyed the nation in July 2022.



In LFP, 74% of survey takers are very concerned about climate change and 14% somewhat concerned. Across the nation, 30% say they are very concerned about climate change and 64% say they are at least somewhat concerned or worried about global warming. (88% in LFP are either very or somewhat concerned; 94% of Americans are either very or somewhat concerned)

Who makes up the LFP Community? Who responded to our survey?

267 of the 446 survey respondents answered our demographic questions.

Figure 2. Almost half of our respondents live in 2-person households. Average household size of 2.5-2.6 is shown in both the census and LFP CAC survey populations.

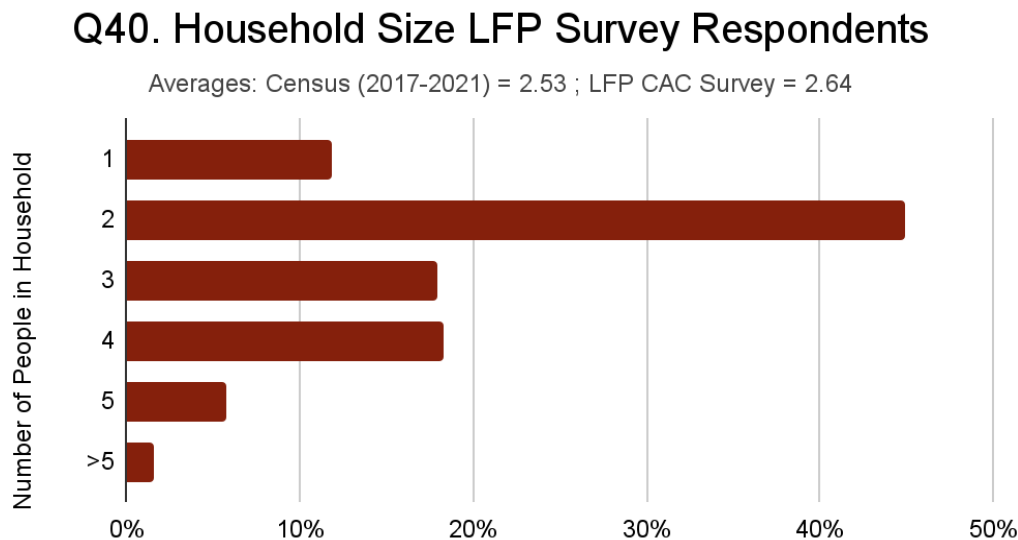


Figure 3. Individuals identifying as female are overrepresented in our survey, as compared with population numbers based on 2020 census data.

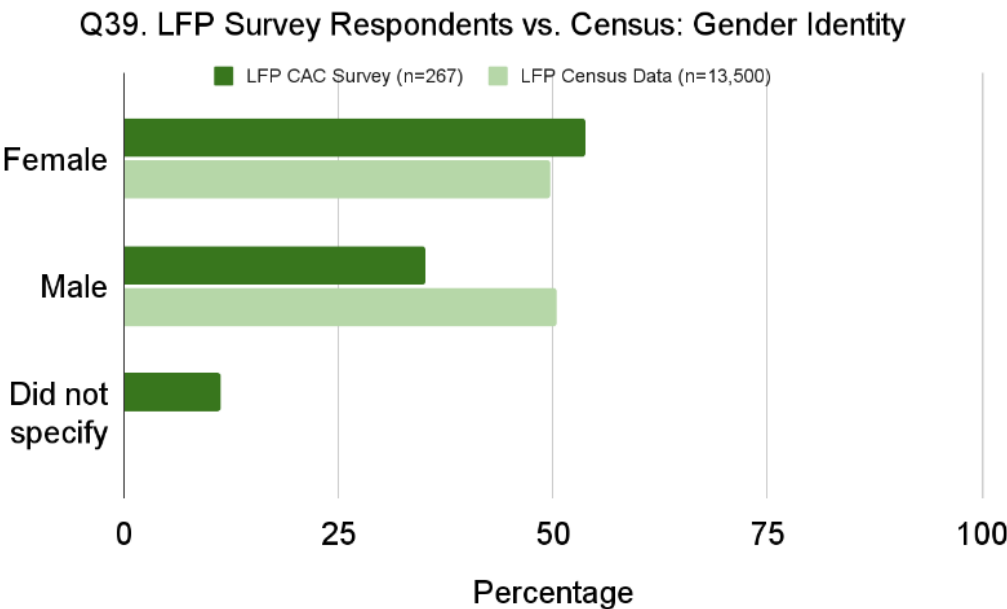


Figure 4a. Age of people in households surveyed.

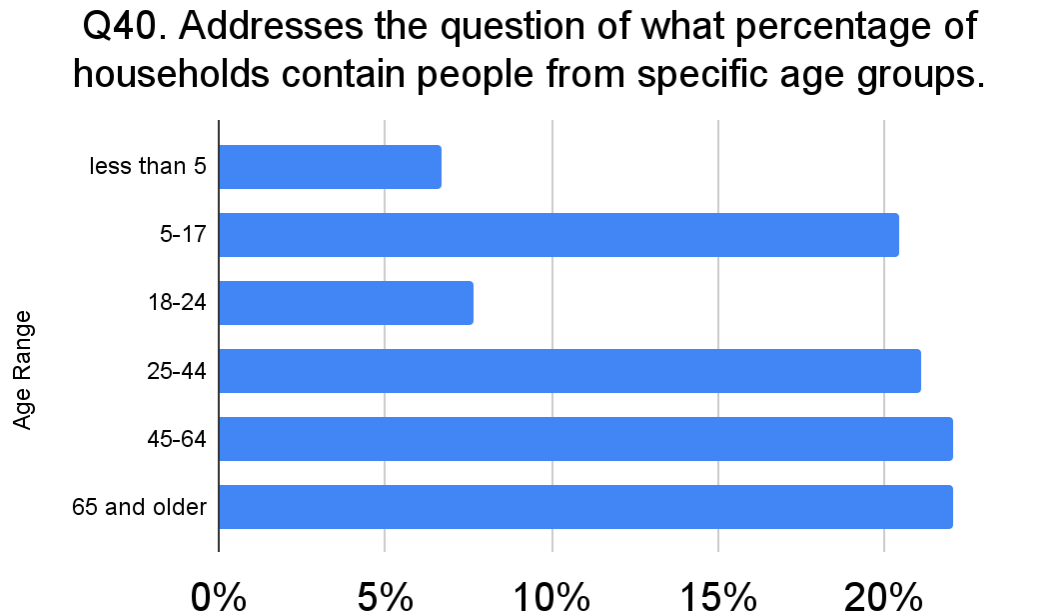
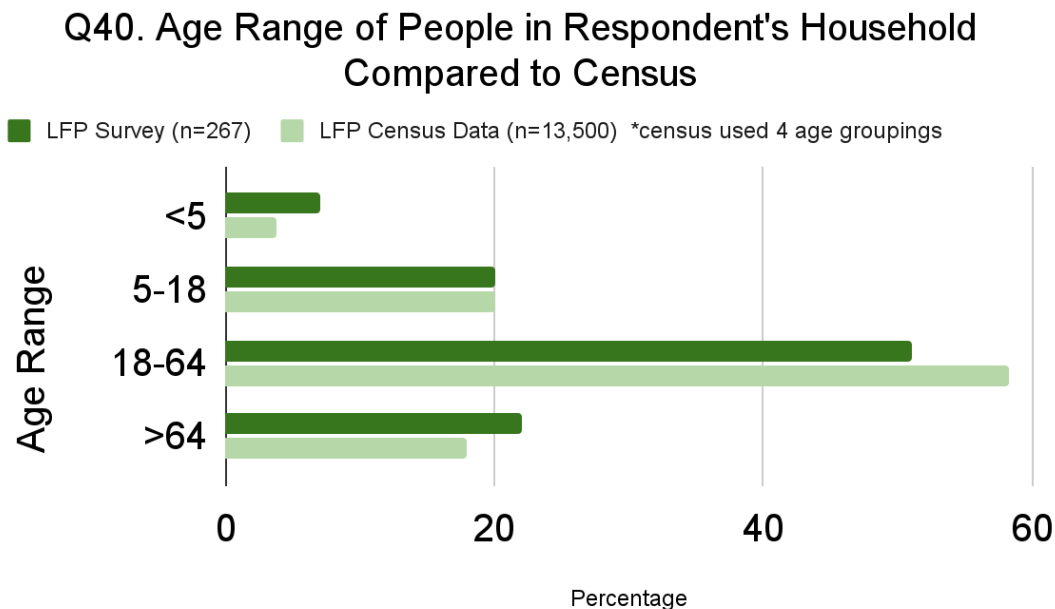


Fig 4b. Most households contain people between 18 and 64, a grouping used by the census.



Most (85%) who answered the survey own their homes and 92% live in LFP. 7% rent homes and 6% (27 people) selected "other," which included those who rent apartments. Those who do not live in LFP live primarily in Shoreline or other neighboring cities.

When asked in what ways they have been affected by climate change, smoke from forest fires was foremost on their minds.

Q4 In what ways have you been affected by climate change? (check all that apply). Answered: 442 Skipped: 4

79% (350)	Experienced negative effects of smoke from forest fires
49% (217)	Feeling uncomfortably hot or cold in my home
51% (224)	Seeing changes in water levels of lakes and streams
48% (211)	Noticing differences in the plant and animal life in my neighborhood
16% (69)	My family or friends have experienced catastrophic effects of climate change
10% (44)	None of the above

Respondents were given the opportunity to select “other” and specify. 80 responses, a few cited eco-anxiety and others pushed back on efforts to address climate change (e.g. “Climate change has always existed. It’s a good thing. Many people choose to live in areas with distinct seasons so there is variety in their lives. The same can be said of climate change, ...it offers variety and unpredictably, ...again, great things to many people.” and “Watching my tax dollars get sucked into black holes of spending trying to combat something that isn’t changeable.”)

Summary of “Other” responses to Question 4

# of responses	Response Type, generalized	Summary statement of responses to “in what ways have you been affected by climate change?”
28	Phenomena/ Earth cycles	Changes in weather patterns, fire, snowpack and other atmospheric events
22	Unconcerned	Not concerned or in denial of climate change
21	Climate Anxiety	Personal feelings of anxiety and emotions for themselves and future generations
16	Local ecology	Observable impacts to surroundings plants, animals and other ecology
3	Outliers	A couple of questions were not responsive

Are LFP residents developing resiliency to the impacts of climate change?

When asked how they are responding to the impacts of climate change, LFP residents are primarily limiting activities outdoors and adding air filters and AC units or heat pumps. Some are modifying their gardens.

Q5. What are you doing as a result of the changing climate? (check all that apply)

71% (316)	Limiting my activities outdoors due to increased amounts of smoke
46% (203)	Adding indoor air filters
41% (182)	Adding AC units and/or heat pump(s)
38% (169)	Changing my landscaping to native plants/pollinators
13% (59)	Planting trees to provide shade (in consultation with an arborist)
12% (53)	None of the above

[Responses](#)

- Other (please specify)
- 28.22%
- 125
- Total Respondents: 443

What are residents already doing to minimize their contribution to climate change?

Half are choosing to walk rather than drive, with fewer than 25% biking or driving electric vehicles.

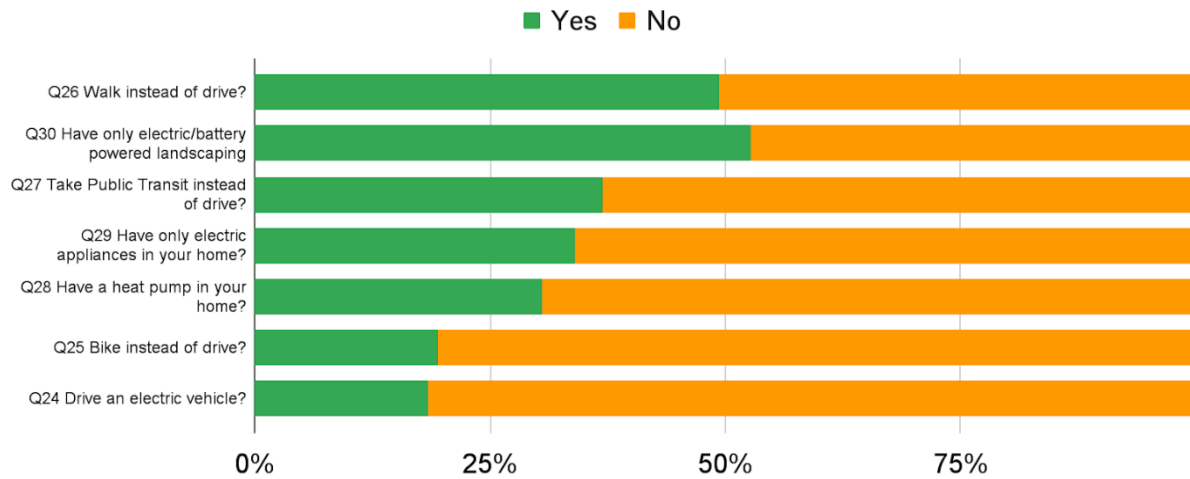
Questions 24 through 30 asked about what ways the respondent is minimizing their contribution to climate change.

- Q26 Walk instead of drive?
- Q30 Have only electric/battery powered landscaping equipment?
- Q27 Take Public Transit instead of drive?
- Q29 Have only electric appliances in your home?
- Q28 Have a heat pump in your home?
- Q25 Bike instead of drive?
- Q24 Drive an electric vehicle

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There are a variety of ways we can minimize our individual contribution to climate change. Do you currently....



Reasons respondents **DO NOT** drive an EV.

# of responses	Working title	Descriptive sentence
123	Cost of an EV	The cost of an EV is prohibitive.
71	Current vehicle works	The current vehicle is working for now for the owner.
47	Charging Infrastructure and range	Concern about charging structure and the range for EV driving.
20	EV not the solution	The cost and energy used to build and operate an EV are not climate friendly.
7	Next Purchase EV	These residents are planning to purchase an EV.

Reasons respondents **DO NOT** bike.

# of responses	Working title	Descriptive sentence
85	Accessibility Issues	A significant number of respondents had accessibility issues with biking— i.e., age, disability
62	Infrastructure	Concerns about safety and lack of infrastructure
60	Local topography	Concern about hilly topography and bike infrastructure

36	Bike not feasible	Long distance to work and/or work requirements
32		These respondents expressed no desire to use a bike
25	Children and cargo	These respondents expressed concerns with transporting children and cargo.
14		Shut-ins or work from home
9	E Bike	These respondents ride an e-bike
3	Cost	Concerns about expense and affordability

Q 27-Reasons people **DO NOT** take public transportation.

# of responses	Working title	Descriptive sentence
140	Not convenient	There are not enough routes (miss 522) and the busses are too infrequent
43	Health and safety	The bus passengers could have covid, there are homeless people on the bus and they are filled with bacteria
27	Occasional users	Use the bus and rail occasionally
12	Work from home	Shift to work at home or the responders just don't use transit
5	Prefer driving	These respondents liked the freedom that driving provides
Reasons people DO take public transportation		
74	Convenience	Public transportation goes where they travel, saves money on parking and ease to get downtown
27	Environmental	Uses public transportation because of environmental concerns
19	other	Not responsive or an occasional user
7	Not convenient	Uses occasionally, but would use more if it were more convenient
5	Enjoyment of safety	The transit is safe and easy to use

Reasons people **DO NOT** have electric appliances in their homes:

Number	Descriptive sentence
97	Already have gas appliances, renters, and legacy owners
47	Cost to convert and cost of electricity is too high
32	Gas is superior
28	Prefer gas for cooking
19	Gas for reliability and capacity issues inside and outside the home.

Q 30 Reasons people use electric powered landscaping equipment.

# of Responses	Working title	Descriptive sentence
55	Environmental Concern	The primary concern is the environmental impact of gas tools.
46	Less Noise	Electric equipment is quieter and gives off fewer fumes.
37	Convenience	Electric tools are cheaper or easier to use.

Q 30 Reasons people don't have electric powered landscaping equipment.

# of Responses	Descriptive sentence
69	not useful information; might rent; or has a gardener and doesn't provide additional information
37	completely against electric tools
34	cannot afford to switch or are delaying but plan to switch
16	in process of replacing tools with electric or battery
13	hand tools are low maintenance environmentally concerned

Q 26 Reasons people do/don't walk.

# of Responses	Descriptive sentence
91	Walking is too far, too hilly, and takes too much time.
67	I walk when possible
65	I walk because it's good for my health

37	Walking is too dangerous there aren't enough sidewalks
35	I live close to shops and walk close distances.
28	I have health issues or I'm too old to walk.
25	Walking is fun.
11	I can't carry things like my groceries.

What are LFP residents' preferred priorities for reducing CO₂ emissions that cause warming?

Most popular answer was partnering with other cities to influence climate friendly policy changes.

Questions 7 to 22 asked respondents about what priorities the city should prioritize. Partnering with other cities to influence climate friendly policy changes received the most "high" ratings. Most of the suggestions were rated as either high or medium priority by over 75% of the respondents. The least popular option, Q21, requiring every homeowner selling their home to provide potential buyers and energy audit was rated low priority by over 50% of the respondents. Complete responses are presented in the table and figure below.

Table of responses to Q7 to 22.

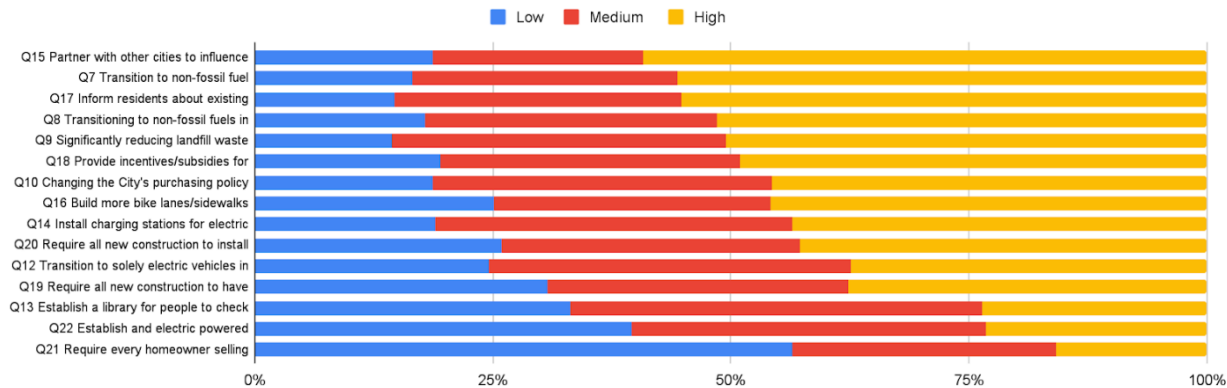
Strategy	Low Priority (#)	Medium Priority	High Priority
Q15 Partner with other cities to influence climate friendly policy changes	76	90	241
Q7 Transition to non-fossil fuel transportation (electric vehicles, biking, etc.)	70	118	235
Q17 Inform residents about existing incentives/subsidies for people and businesses to transition to non-fossil fuels	60	123	226
Q8 Transitioning to non-fossil fuels in homes, businesses, school buildings, and city buildings	76	130	218
Q9 Significantly reducing landfill waste generation	61	150	215
Q18 Provide incentives/subsidies for people and businesses to transition to non-fossil fuels	80	129	201
Q10 Changing the City's purchasing policy	78	149	191
Q16 Build more bike lanes/sidewalks	102	118	186

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Q14 Install charging stations for electric vehicles	77	152	177
Q20 Require all new construction to install heat pumps	105	127	173
Q12 Transition to solely electric vehicles in the City's fleet	100	155	152
Q19 Require all new construction to have non-gas appliances and/or heating	124	127	152
Q13 Establish a library for people to check out electric/battery powered landscaping equipment	135	176	96
Q22 Establish and electric powered community shuttle	160	151	94
Q21 Require every homeowner selling their home to provide potential buyers an energy audit that defines household energy uses, losses and potential improvements	231	113	65

We can utilize strategies or actions like those listed below to reduce our community's contribution to climate change. Do you think our City should make these strategies a high, medium or low priority? (Ordered for graph with highest



"Other" Strategies City should Try

# of responses	Category of Response	Summary statement
34	Not Relevant	Answers not relating to the question or not yet possible
28	Transportation	Providing clean transportation and encouraging walking and biking
19	Unconcerned/against change	Residents blame the government and have a disbelief in the problem

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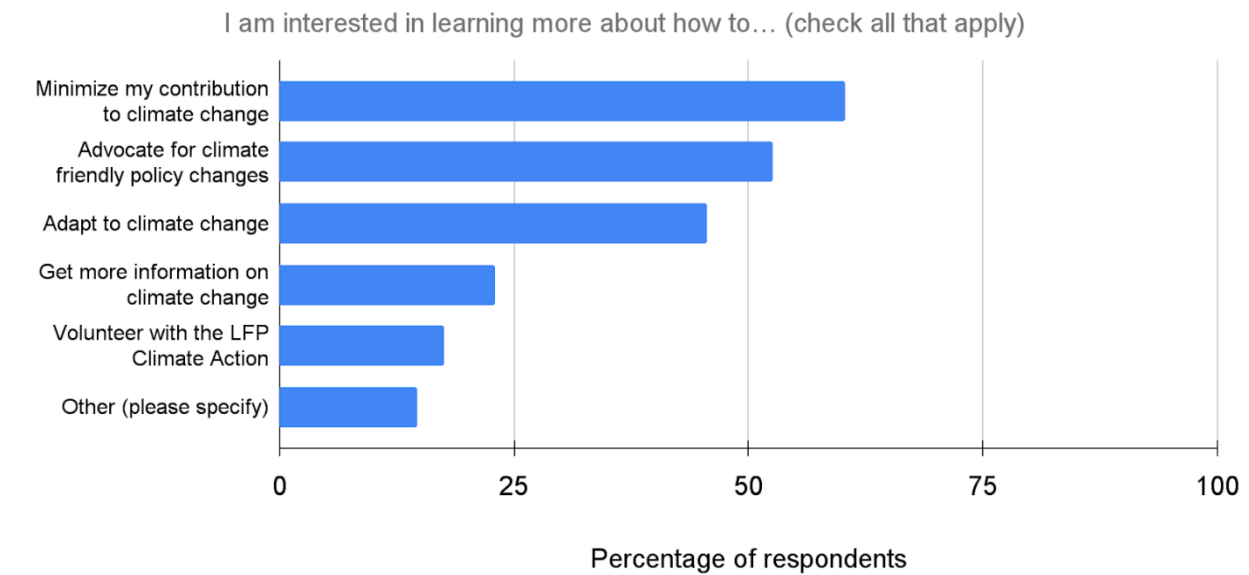
13	Green spaces and trees	Installation/protection of already existing trees and green spaces
10	Alternative energy sources	Encourage solar power and hydro power instead of fossil fuels and gas
4	Zoning housing and infrastructure	Support/against zoning that would make denser housing and communities
3	Emergency response	Have emergency fund for emergency event response to extreme weather events

Other ways respondents are minimizing individual contribution to climate change.

# of responses	Working title	Descriptive sentence
57	Recycle	Recycle as much as possible and expand opportunities to recycle and to reduce and eliminate plastics.
49	Conservation of heat and water resources	Residents took specific actions to conserve heat and water including short showers, not watering lawns, diet considerations—vegan and vegetarian diets and now having children.
27	Less travel	Residents are traveling less especially by airplane, working from home and consolidating car trips.
19	Local shopping and reuse	Residents are shopping locally if they can consolidate deliveries and shopping at re-use stores.
16	More Composting	Residents are composting on site and using commercial composting (Ridwell and Republic)
3	Vote	Residents vote and encourage others to vote for people who support their point of view

Over half of survey respondents want help figuring out how to minimize their contribution to climate change and want to learn more about being an advocate for climate friendly policy change.

When asked what they wanted to learn more about, the most popular response was minimizing their contribution to climate change (60% of respondents), and almost as popular was learning more about advocating for climate friendly policy change (53%). Of the 5 options listed (see figure below) the least popular was getting more information on climate change (23%) and volunteering with the LFP Climate Action Committee (17%).



Get more information on climate change	23% (50)
Minimize my contribution to climate change	60% (131)
Adapt to climate change	46% (99)
Advocate for climate friendly policy changes	53% (114)
Volunteer with the LFP Climate Action Committee	17% (38)
Responses	15%
Other (please specify)-these were not informative	(32)

People in Lake Forest Park are getting climate information from a wide variety of sources.

- 47% or 127 get info from friends and family
- 17% or 47 get info from school or college
- 41% or 125 people get info from social media and websites (see table below)

When asked where else they find useful climate information 79 indicated newspapers (yay!), see Tables below for detail.

Q 34 Where else do you find useful climate information and guidance?		
# of Responses	Working title	Descriptive sentence
79	News papers	respondents got information from newspapers most noted were the New York Times and the Seattle Times.
23	Organizations	Respondents got information from organizations, usually ones they were members of, from the Audubon to the Rotary to the Garden Club.
21	Internet	most mentioned generic Internet sites several listed scientific sites general to scientific.
21	Journals, books, magazines	in depth, long format articles and books
6	government	Government official publications from cities and other sources
5	skeptics	Did not think climate change was an issue didn't look up anything

Where are you getting your information on climate?

Number	Source
6	Lake Forest Park Stewardship Foundation
5	People for Climate Action
3	League of Women Voters Climate Committee
2	Shoreline trees
2	Puget Sound Aquarium
2	Democratic Party Climate Committee
2	Sierra Club
2	350 Seattle
2	Stop the Money Pipeline
2	CA Families

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1	Native Conservation
1	Mountains to Sound Greenway
1	5 Acre Woods
1	StreamKeepers
1	Global Warmer Policy
1	Native Plant Society
1	Sea Green Leadership
1	Washington Environmental Voters
1	LFP for Peace
1	Ground Zero Center for Nonviolence
1	Pass the New Green deal
1	Earth Corp
1	Front and center
1	Grace Cole
1	CCL Citizens Climate lobby
1	Program on Climate Change -UW
1	Paws
1	Climate reality
1	Friday for the future
1	PNW Climate Alliance
1	Rotary Environmentally Sustainable Committee
1	Master Gardeners
1	Climate Action Committee
1	Climate Hawks
1	Shoreline Museum
1	Water District
1	PSAKA
1	Nature Conservancy

Where are you volunteering in groups whose goal is to address climate change?

Number	Source
7	LFP Stewardship Foundation including Grace Cole
4	People for Climate Action
3	StreamKeepers
3	LWV Climate Committee
2	Save Shoreline trees
2	Puget Sound Aquarium
2	350 Seattle
2	Stop the Money Pipeline
2	LFP Climate Committee

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2	Sierra Club
1	Nature Conservancy
1	Mts to Sound Greenway
1	5 Acre Woods
1	Kenmore Water Activity Club
1	Global Warming Policy Foundation
1	Dayenu (?)
1	LFP Climate Action Committee
1	Washington Native Plant Society
1	Seattle Green Partnership
1	Earth Corp
1	Front and Center
1	CCL Citizen Climate Lobby
1	Program on Climate Change at UW
1	PAWS Wildlife facility
1	Climate Reality Project
1	Fridays for the Future
1	Pacific Northwest Forest Climate Alliance
1	Whale Scout
1	Climate of Hope
1	Climate hawks
1	Coltura
1	Climate Action for Families
1	LFP Water District
1	Shoreline Historical Museum
1	Green new deal coalition
1	Democratic Party Climate Committee
1	Nature Conservancy
1	WA Environmental Voters
1	LFP for Peace
1	Ground Zero
1	Center for Nonviolent Action Poulsbo
1	Shoreline school district Resource Conservations advisory Committee
1	Master Gardeners
1	Rotary Environmental Sustainability Committee

Appendix 5: Demographic Data

POPULATION

The 2020 US Census (US Census Bureau 2020) reports that Lake Forest Park has a population of 13,603 persons. The median age for Lake Forest Park residents is 42.6 (± 2.6). About 18.2% of the Lake Forest Park population is 65 years old or older. The largest Lake Forest Park racial/ethnic groups are White (73.6%) followed by Asian (11.2%) and Two or More races (10.7%).

MEDIAN INCOME

The median household income of Lake Forest Park households was \$152,010, significantly higher than the statewide median income of \$91,306. However, about 3.2% ($\pm 1.1\%$) of Lake Forest Park residents live in poverty.



Appendix 6: Natural Systems

Green Spaces and Climate Change Resilience

Urban green spaces can help mitigate climate change by sequestering atmospheric carbon (from carbon dioxide) in tissue and by altering energy use in buildings. Understanding an urban forest's structure, function and value can promote management decisions that will improve human health and environmental quality. Specifically, the urban forest can help improve air quality by reducing air temperature, directly removing pollutants from the air. Emissions of pollutants into the air can result in changes to the climate (FNCA, 2018). Pollution removal by trees in Lake Forest Park was estimated using field data and recent pollution and weather data available. For complete details, see the Tree Inventory Report (City of Lake Forest Park 2023).

Climate Change will directly and indirectly affect the urban forests of Lake Forest Park.

1. Changing plant hardiness zones by a half zone towards the end of the century (Kim, et al. 2012) by shifting seed transfer zones around the Salish Sea for western redcedar, western hemlock, and Douglas-fir further northwest, or disappear by the end of the century.
2. Increase the likelihood of winter kill (unnatural warming followed by rapid cooling)
3. Favor many populations of tree pest and pathogen
4. Alter water cycles by increasing winter precipitation and summer evaporation and transpiration.
5. More frequent and intense extreme weather events increase the likelihood of severe flooding, which may uproot trees and cause injury or death to tree root systems if waterlogged soils persist for prolonged periods.

Proactive management is necessary to protect urban forests against climate-related threats, and to sustain desired urban forest structures for future generations. Seattle recently formed the Urban Forestry Core Team (2020) to provide better oversight of their urban forests to facilitate existing policies, programs, regulations, and incentives that are used to manage Seattle's urban forest and combat climate change.

Specifically, urban green spaces can mitigate climate change effects by (from World Resource Institute):

1. Acting as a yearly net carbon removal resource.
2. Reducing economic costs from climate change adverse effects. Conserving forests and avoiding forest degradation is the most cost-effective strategy to lower emissions. Trees can provide significant benefits for adaptation by providing buffers to certain climate risks and making urban spaces more livable.
3. Improve residents' health and life expectancy. Urban trees provide many benefits beyond climate mitigation and adaptation, including improving residents' health and well-being by decreasing high blood pressure, reducing stress, and improving mood, boosting



immune systems, reducing the risk of some psychological disorders, and supporting mental development in children.

Urban green spaces have recently been shown to have positive effects on resident health and cognitive abilities.

1. Green spaces are linked to an improved mental health state due to COVID-19 lockdowns. Londoners in closer proximity to nature and parks reported better mental health than those living further away from nature and parks during COVID-19 lockdowns. (Lee et al. 2023)
2. Being in nature can improve mental health and cognitive function (Bratman et al. 2015). Also, just by looking at a picture of a green roof on a computer instead of concrete, increased cognitive function. (Lee et al. 2015)
3. Nature can make us physically healthier. This study shows post-stroke patients who had more exposure to green space survived longer than those with less green space access. (Wilker et al. 2014)

Any Urban Forest policy should be constructed as comprehensive considering future populations, commit to race and social initiatives that are proactive in promoting equity and environmental access for all citizens.

Strategies to preserve and restore urban green spaces of Lake Forest Park should include (Safford et al., 2013):

1. Climate Smart policies and protections for urban trees. Urban forest managers can help aid reductions efforts by preferentially allocating resources to trees that are more effective at mitigating emissions. These should include protecting large-stature species with dense wood, identifying the best carbon-capturing trees, and maintaining tree canopy in perpetuity.
2. Green Corridors provide both ecological services, such as habitats and resources for urban wildlife; but also providing services to urban populations such as mobility networks and access to green spaces through the provision of sustainable and active transport routes that link transport with mixed land use (residential, commercial, education, recreation etc.) and open spaces.
3. Smart Climate-conscious tree planting. Planting trees around buildings to promote energy efficiency, enlarging and improving planting sites to improve tree longevity and increase stormwater infiltration, and including trees in street improvement projects. Planting a diverse mix of pest-tolerant, well-adapted, low-maintenance, long-lived, and drought-resistant trees ensures greater resilience, while planting small groves of especially water-tolerant species in areas receiving peak volumes of stormwater runoff reduces flooding and pollutant transport.
4. Allocate resources for urban tree maintenance. Establishing and adhering to a regular maintenance cycle can help protect cities from extreme weather events. Young trees must be pruned early and often to encourage development of strong branching structures that are less vulnerable to storm and wind damage, and hazardous or diseased trees must be removed.



5. Mitigate effects of climate change inequities based on social and cultural classes. Expanding tree cover is an opportunity to address inequitable access to trees and green space.
6. Enhance collaborative governance across traditional boundaries to engage constituents, increase environmental and political awareness across generations, and enable communities to better address complex issues such as climate change. Due to limited staff and budget resources, many cities rely on partnerships with private landowners, organized citizen groups, and nonprofit agencies to effectively manage urban ecosystems. In some areas, citizens participate in advisory commissions that provide input to local officials on policy and regulations governing urban forests. In others, partnerships promote innovative greening strategies that complement or augment existing programs.

Urban Watersheds and Climate Change Resilience

Urban watersheds are key contributors to climate change mitigation strategies and protecting urban stream environments should be considered a high priority in terms of climate resilience and adaptation.

The ecological, functional value of streams in urban environments can be divided into four categories: biodiversity, maintaining hydrological processes, improving climate, and providing direct and indirect financial benefits. Watersheds in the city will help even out temperature deviations both during summer and winter. The vegetation associated with streams, known as riparian zones, reduces the temperature of the surrounding area during the summer by shading and evapotranspiration (Walsh et al., 2005).

Climate Change will directly and indirectly affect the urban watersheds of Lake Forest Park by:

1. Increased magnitude and unpredictability of flows
2. Increased water temperatures, elevated nutrient, and contaminant concentrations.
3. Decrease in the number and variety of plant and animal communities. Many of the effects of climate change on stream ecosystems are indirect via effects on riparian vegetation and canopy structure.

Lake Forest Park offers a unique glimmer of hope given our large tree canopy cover and large greenbelts associated with the two main watersheds, McAleer and Lyon Creek Basins. However, unless high priority in preventing further development and disruption of these basins is implemented, Lake Forest Park may concede to the constraints that most other urban areas cannot avoid.

Specifically, urban watersheds can mitigate climate change effects by:

4. Acting as green corridors or natural air vents because they create air flows, thus contributing to the renewal of the air we breathe and the control of pollution in the atmosphere.



5. The riparian zones filter air by holding suspended dust particles induced from the road traffic, the building activities, and they enrich the atmosphere with oxygen.
6. The vegetation and the soil of streams contribute to the retention and infiltration of the rainwater and the reduction of the surface runoff which can constitute a significant flood prevention mechanism.
7. Hosting a variety of habitats of plant species, birds and animals and facilitating species migration by connected species-rich areas, act as corridors which are suitable for wildlife habitat and migration and can be the tool to mitigate habitat loss and fragmentation and conserve biodiversity.
8. Offer social values such as recreational use, participation, nature and scenery, sanitary management, and water safety as being important factors relating to public perception of urban stream corridors and greenways.
9. Provide scientific information and function as indicators of the state of the urban environment.
10. Venues for ecological and environmental education. The City of Lake Forest Park should have an obligation to educate children about the environment surrounding them and the role urban streams play in the environment and how they are connected and affected by negative impacts on them.

Successful rehabilitation of urban watersheds can only be achieved once stormwater management and the spatial distribution of water storage are re-established and protected throughout the urban basin. There are five principles for urban stormwater management as proposed by Walsh (2016).

1. Ecosystems to be protected must be identified, and objectives for their ecological preservation must be set.
2. Prevent significant runoff volumes from reaching the stream so that the interplay between evapotranspiration, infiltration, and streamflow should resemble predevelopment conditions.
3. Stormwater control measures (SCMs) should yield flow regimes that resemble the predevelopment regime in both quality and quantity.
4. SCMs should be able to store water from high flow events so that the frequency of disturbance to biota does not increase in comparison with predevelopment conditions.
5. SCMs should be implemented on all impervious surfaces in the catchment of the target stream. Examples of SCMs are rainwater tanks, infiltration systems that receive overflow from tanks and impervious surfaces, and biofiltration systems.

Strategies to preserve and restore the watersheds of Lake Forest Park should include:

1. Restore geomorphology through channel rehabilitation by replacement of concrete or riprap streambed with a more natural substrate, such as gravel and sand, and, in cases where banks cannot be re-naturalized, the incorporation of engineering-based methods, such as porous concrete that allows the development of riparian vegetation.



2. Maintaining riparian environments by removal of invasive species and establishing buffer zones for riparian environments.
3. Restoration of stream hyporheic zones have also been key mitigation for salmon recovery programs. Restoration of hyporheic zones in heavily impacted areas should be prioritized and can be done relatively cheaply. Re-seeding healthy benthic invertebrates into restored areas should be researched and considered.
4. Establish routine biological monitoring annually to assess stream health through macroinvertebrate assemblages (Biological Integrity of Benthic Invertebrates [\(B-IBI\)](#)). This can be done with community involvement and educational outreach programs.
5. Reintroduction of native kokanee salmonid populations (*Oncorhynchus nerka*) into both Lyon and McAleer Creek basins, as outlined by Lake Sammamish Kokanee Work Group (KWG). Salmonid populations are keystone species and play an essential role in the health and function of ecosystems. Both Lyon and McAleer Creek basins once had large populations of this native species of landlocked salmonid kokanee, as outlined by Lake Sammamish Kokanee Work Group (KWG). Salmonid populations are keystone species and play an essential role in the health, resilience, and function of ecosystems. Keystone species will be vital components of ecosystem resiliency during climate change.

Any Urban Stream policy should be constructed as comprehensive considering future populations, commit to race and social initiatives that are proactive in promoting equity and environmental access for all citizens.



Appendix 7: Hiring Committee Guidance

Guidance for a hiring committee in the form of potential interview questions for a city Climate Action Plan Program Manager

As the city's first Climate Action Plan Program Manager, what steps would you take in the first six months to develop and begin implementing the Climate Action Plan? What outcomes would you try to achieve by the end of that period?

What is your experience working with communities, including (for example) conducting research and education outreach? Based on that experience, how would you approach building the relationships, both internally and externally, that are needed to achieve the City Council's program goals and priorities? Who would you engage? What strategies might you employ to secure the parties' support and engagement?

Give an example of a project that required you to research, collect, analyze, organize, synthesize, and present a variety of data accurately and clearly in both written and graphic form.

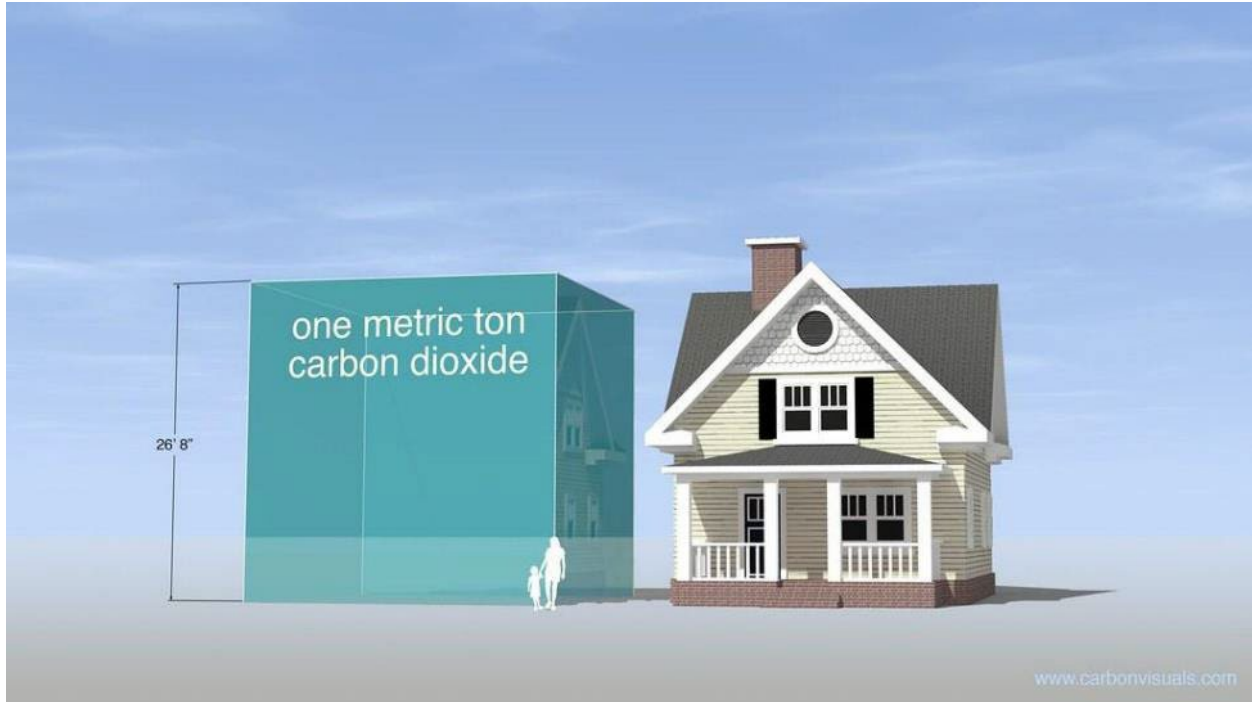
What does diversity, equity, inclusion and accessibility mean to you in the context of the Climate Action Plan and its implementation?

In thinking about your goals for the next stage or phase of the Climate Action Plan and the Climate Action Committee, what is one area that you need to focus on to grow and develop your skills for achieving those goals?



Lake Forest Park Climate Action Plan

Appendix 7: Hiring Committee Guidance



Appendix 8. Climate Change Impacts

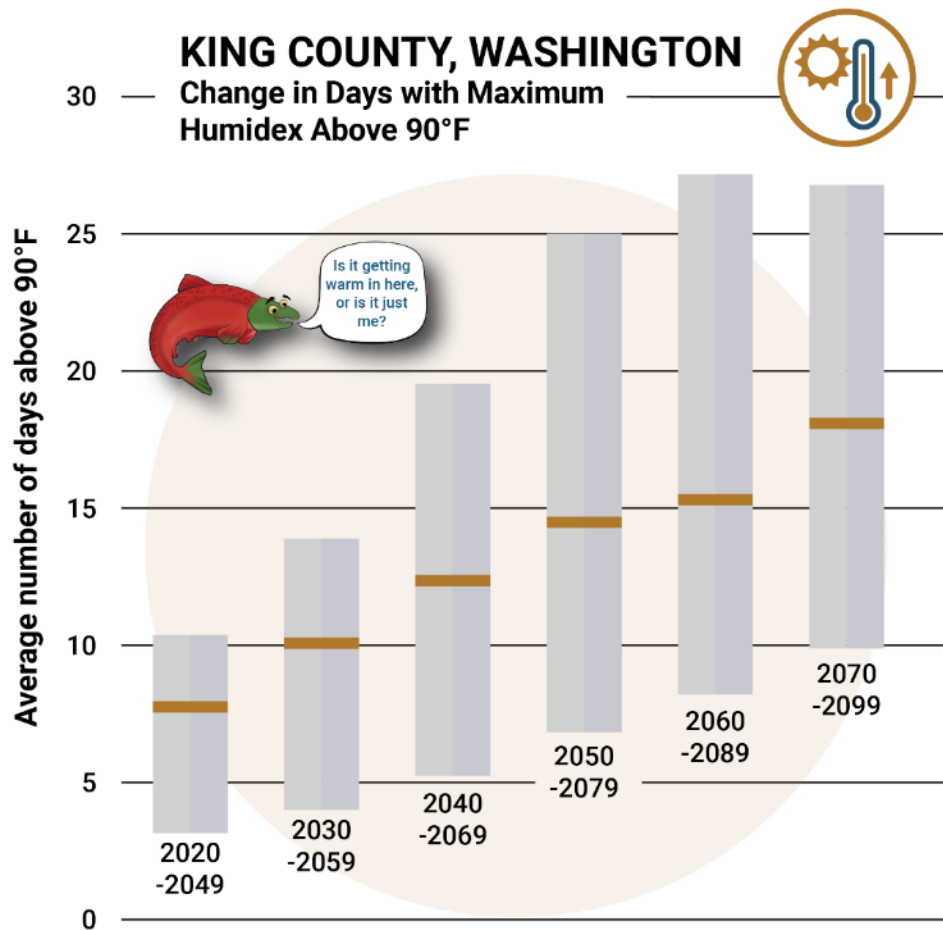
Key climate change impacts facing Lake Forest Park are increasing temperatures and extreme heat, changing precipitation patterns, and increasing wildfire severity and hazardous air. Leadership from the city in preparing for these events can empower residents to take action, create a sense of shared mission, and support emotional well-being.

Increasing Temperatures & Extreme Heat

Temperature is what is measured by a thermometer; when you add in humidity, that is the heat we feel. An index called Humidex represents a combination of humidity and temperature that is used to describe and model heatwaves. The western U.S. is experiencing more frequent multi-day heat waves, which are more widespread, hotter, and longer lasting than in previous decades according to the Fourth National Climate Assessment (USGCRP, 2018).



Figure 7. Change in days with maximum humidex above 90 degrees across 30-year increments



Heat events in King County in the future are shown in Figure 2. The graph shows results from the [Climate Mapping for a Resilient Washington](#) tool (UW CIG 2023). The graph shows a best-case scenario future in which we curb emissions significantly to prevent average temperatures rising more than 1.5°C. Even in this scenario, King County would average 2-3 more extreme heat days each year between 2030-2059 than in the current 30-year period.

We are concerned about this continued increase in hotter average temperatures and associated heat waves in Lake Forest Park because they result in (Lemery and Auerbach 2017):

- Increases in heat-related illness and death, especially for children, the elderly and individuals with asthma, chronic obstructive pulmonary disease, and other breathing issues.
- Increased incidences of diseases carried by mosquitoes, ticks, and other vectors that thrive in

Climate change amplifies existing risks and disparities, such as chronic health conditions, social and environmental circumstance, and pollution exposure, which can result in variable impacts on vulnerable communities within Lake Forest Park.

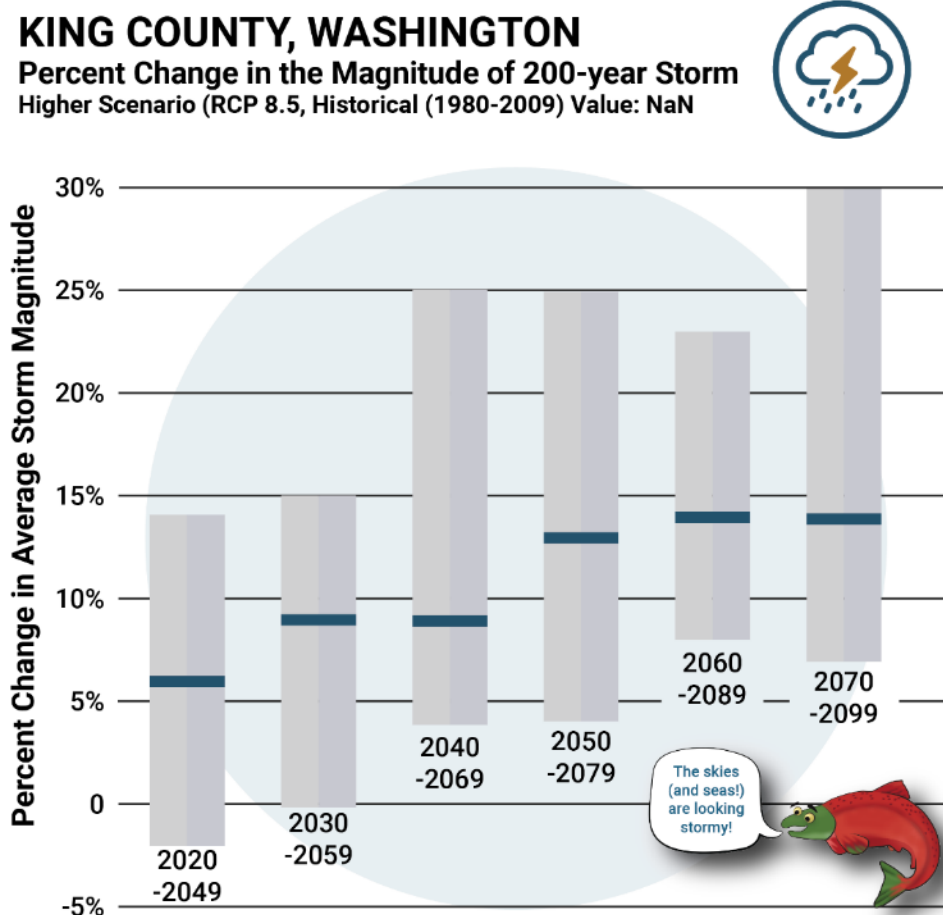
warm and humid climates. Waterborne diseases will also become more common.

- Damages to, and accelerated deterioration of, important elements of infrastructure: energy systems, buildings, water conveyance and treatment systems, roads, railways, and areas with tarmac.
- Decreases in the amount of oxygen the water can hold, which will compromise habitats for many aquatic animals. Low-oxygen conditions also promote blooms of harmful algae and bacteria that poison streams and waterways.

Changing Precipitation Patterns

Heavy rain and snow events are becoming more common across the country. Over the past several decades, increases in the temperature of the Pacific Ocean have driven warmer atmospheric currents that transport larger amounts of moisture into the U.S. west coast. Warmer air carries more water so as air temperatures increase, these currents carry larger volumes of water. Flooding associated with these heavy precipitation events damages infrastructure and threatens the health and safety of residents.

Figure 8. Percent change in the magnitude of 200-year storms



In King County, the amount of precipitation in a “two-hundred year storm” (a storm of such magnitude only seen every two hundred years), could contain on average, 9% more water in 2030 than the average seen in 1980-2009 (Figure 3). This projection references a higher emissions scenario (projections for the lower emissions scenario are not modeled by “[Climate Mapping for a Resilient Washington](#)” tool).

Heavy rainfall events and flooding caused by rainfall and rapid melting of snow negatively affect the natural and built environment of Lake Forest Park by causing:

- More frequent mudslides and urban flooding, which damages homes, businesses, and roads.
- Flows of water that carry pollution and high amounts of nutrients, creating more frequent harmful algal blooms in Lake Washington and Puget Sound. In their toxic form, blue-green algae can cause illness in humans, pets, waterfowl, and other animals that come into contact with the algae. Toxic blooms can kill livestock and pets that drink the water.
- Large, rapid flow of water through streams that erodes streambeds. This erosion harms salmon populations and other aquatic life, such as by reducing salmon egg viability.

Increasing Wildfire Severity & Hazardous Air Quality

Large, severe fires in the Pacific Northwest are linked to warm and dry conditions, which will likely occur more often as the earth continues to warm ([Halofsky et al, 2020](#)). Residents of LFP should be prepared for wildfires to disrupt energy infrastructure as well as increase the number of days with unhealthy air quality (Raymond n.d.)

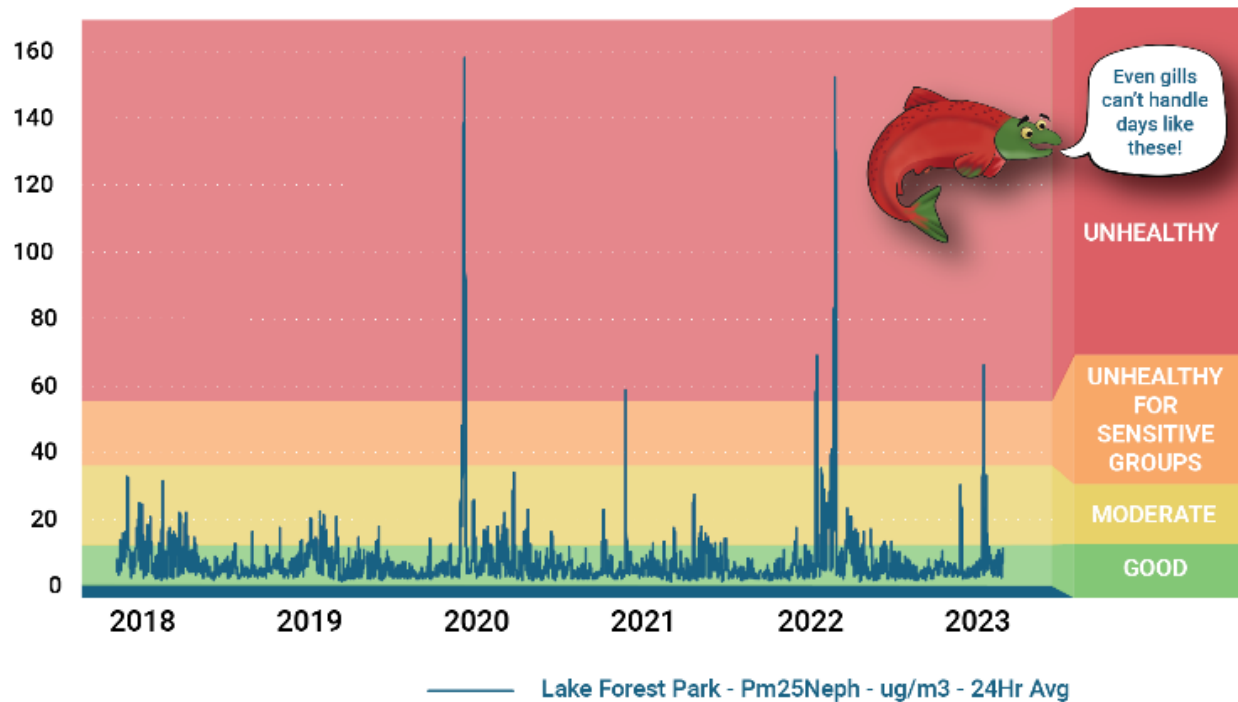
Even distant wildfires can negatively impact air, water, and soil quality, as smoke contains fine particles (PM_{2.5}) and other toxic components that can travel hundreds of miles before settling out of the air (Washington Department of Ecology 2023).



Lake Forest Park Climate Action Plan

Appendix 8. Climate Change Impacts

Figure 9. Five years of air quality data (PM_{2.5}) in Lake Forest Park, downloaded from the [Puget Sound Clean Air Agency](#).



For one or more days in the summers of each of the last three years, residents of Lake Forest Park, as well as our surrounding land and streams, were exposed to unhealthy air caused by distant wildfires (Figure 4). Summers are cherished times for those in the PNW - times spent outdoors in our gardens, on trails, and at the beach. But unhealthy smoke exposes everyone, including outdoor workers and the unhoused, to smoke pollutants, which cause wide-ranging health consequences and overall increases in mortality. Smoke pollutants are associated with asthma and other respiratory problems, worse outcomes for birth, COVID-19 infection rates, and emotional well-being (USGCRP 2023).