

**TO:** Mayor and Lakewood City Councilmembers

**FROM:** Andrea Bell, Associate Planner

**THROUGH:** David Bugher, Assistant City Manager, Community Development

Director

**DATE:** June 7, 2023

**SUBJECT:** Update on Draft Climate Change Action Plan

**Report Issue:** Update on progress made towards five-year draft climate action plan.

**Discussion:** For over 30 years, communities in Washington State have been required to formally plan for the future through the State's Growth Management Act (GMA). GMA directs local governments to establish comprehensive plans that limit sprawl and focus population growth within existing urban areas. Comprehensive plans are required to be updated periodically to guide decisions about new housing, transportation, public services, and utilities. Within recent years, environmental groups have lobbied the State to require comprehensive plans to take climate change into account. Larger cities, such as Lakewood, will now be required to draft and adopt a Climate Change Action Plan pursuant to House Bill 1181, which officially goes into effect on July 23, 2023.

**What Have We Done?** The City has already made progress towards responding to the impacts of climate change and planning for future goals and policies. In 2021, Lakewood adopted Chapter 10 of the Comprehensive Plan directly related to energy and climate change. The purpose of this chapter states the following:

"This chapter examines how the city's policies will affect energy consumption and determines what measures can be implemented to reduce greenhouse gas emissions to state required levels. The chapter provides policy direction for conserving energy resources and responding to climate change. Broadly framed goals address energy conservation, renewable energy generation and use, and sustainable and responsible community revitalization. More specifically, policies and implementing tasks are designed to: provide leadership to manage on climate change; promote clean and efficient transportation options; encourage sustainable and efficient energy systems; promote sustainable development; support community revitalization; and build a climate-resilient community."

In 2022, Lakewood was one of eight cities across Washington State to receive a 2022 Governor's Smart Climate Strategies Award for its work on climate change and the addition of Chapter 10 to our Comprehensive Plan.

In October 2022, The City of Lakewood adopted Ordinance No.776 to establish a three-year climate change work plan. The work plan includes 14 items which are ranked by difficulty /effort (D), priority (P), and financial considerations (F). The summary table below was adopted with said ordinance and includes a new status update column reflecting progress towards each action item.

Item	Implementation Measure*	Category	Partners	Estimated Cost	Points (D,P,F)	Timeframe	Updated Progress Report
1	Establish (and regularly update) a new climate change chapter to the City's Comprehensive Plan	ALL: Energy & Built Environment; Transportation; Consumption & Waste Management; Carbon Sequestration; Education & Outreach	Puget Sound Energy; Tacoma Power; Lakeview Light & Power; Pierce County Sustainability Collaborative	Chapter adopted in 2021 at a cost of around \$20,000 which included a grant from Dept. of Commerce; funding for future updates' through another Dept. of Commerce grant &50K issued in 2022.	14	Chapter already adopted; some revisions expected as part of the 2024 comprehens ive plan periodic update.	Ongoing. Revisions informed by State law and public feedback expected as part of 2024 Comprehensive Plan periodic review.
2	Develop a five-year plan for reducing greenhouse gas emissions. The action plan shall include four-main topics: a comprehensive greenhouse gas emissions inventory and forecast; emissions reduction target(s); Carbon Sequestration targets; & a program for monitoring and reporting out the implementation tasks found in this document.	Energy & Built Environment	Puget Sound Energy; Tacoma Power; Lakeview Light & Power; Pierce County Sustainability Collaborative	New Associate  Planner FTE in 2022, with an estimate cost of \$115K. (An existing working group at the state level is in the process of determining specific targets for counties and cities. Materials should be available the beginning of 2023. First five-year plan would be more challenging to develop than subsequent plans).	12	First five- year plan adoption in 2024	On 5/31/23, the City Council obligated \$340,000 of ARPA funds to fund a certified arborist, tree assessment, and public outreach through 2026. Lakewood has also submitted interest for a \$250,000 DNR grant to complete a tree assessment and set up administration of a community partner program to plant trees and provide maintenance education in some of the most historically disadvantaged areas in the south and east of the City.
3	Update the City's Non-motorized Transportation Plan (also referred to as Active Transportation Plan).	Transportation	Internal; Pierce College; Clover Park Technical College; Western State Hospital; Pierce College; CPSD; WSDOT; Steilacoom; UP; Tacoma; Pierce County	Contract approved by the City Council, July 18, 2022 in the amount of 75K.	12	Completed by June 2023	An updated final 2023 NMTP was presented to the City Council on 4/24/23.

Item	Implementation Measure*	Category	Partners	Estimated Cost	Points (D,P,F)	Timeframe	Updated Progress Report
4	Clover Creek Floodplain Engineering Alternatives Analysis.	Energy & Built Environment	Internal; property owners; Pierce County Public Works & Planning; WA State DOT; FEMA	Contract approved by the City Council, November 1, 2021 in the amount of \$271,377.	12	Completed by November 2022	PWE presented the final Clover Creek Engineering Alternatives Evaluation study report to the City Council on 3/20/23. Potential alternatives include: 1) Do nothing 2) Enhance the stream corridor to better pass the flows. 3) Construct a Levee/Floodwall along I-5 4) Construct a Levee/Floodwall along the stream corridor between Bridgeport Way and the railroad upstream.  City Council approved alternatives analysis 6/5/23 via Motion 2023-60.
5	Review, and as appropriate, update Lakewood Municipal Code (LMC) Title 14, Environmental Protections. Title 14 Provides regulations for geologic hazard areas, flood hazard areas, and critical lands and natural resources. Climate change impacts may require that new regulations be inserted into this chapter. (Types of critical areas: wetlands; aquifer recharge areas; fish & wildlife conservation; flooded areas; and geologic hazards.)	Energy & Built Environment	Washington Department of Ecology; Washington State Department of Commerce	Work is underway in two parts within 2024 Comprehensive Plan Periodic Review:  - First part, Title 14, was updated as part of the City's proposed tree preservation regulations.  - Second part, 2024 Critical Area Regulation update being funded by Dept. of Commerce comprehensive plan periodic review grant.	11	First part: adoption scheduled for October 2022. Second part: June 2024	Updated Tree Preservation code adopted by Council on 11/7/22. City Council will consider adoption of the Comprehensive Plan tree canopy goal of 40% by 2050 as part of the 2023 Comprehensive Plan amendments.  CAO updates part of the 2024 Comprehensive Plan Periodic Review
6	Work with Pierce County and Pierce County municipalities to develop a regional approach and best practices to address climate change. One strategy: adopt revised climate change Pierce Countywide Planning Policies.	ALL: Energy & Built Environment; Transportation; Consumption & Waste Management; Carbon Sequestration; Education & Outreach	Pierce County; loose consortium of Pierce County cities	Part of current CED operations. City Council adopted updated Pierce Countywide Planning Policies (CPPs), Motion 2022-62, September 6, 2022. The 2022 CPPs support strategies to slow and mitigate impacts of climate change.	11	Ongoing	Ongoing. Lakewood progress to be presented date at 2023 Pierce County Climate Conversation - Creating Resiliency through Sustainability event.  Lakewood tracking potential for federal funding starting in 2024 from regional project being spearheaded by PSRC and the PSCAA.

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7	Develop a public engagement plan for climate change (and comprehensive plan periodic update). *	Education & Outreach	University of Washington, Evans School of Public Policy & Governance	UW Evans School work completed summer 2022. Creating ECCC engagement plan funded by \$50K Commerce Grant.	11	April 2023	The 2024 Comprehensive Plan periodic review Steering Committee to complete review and feedback on Climate Change Chapter and Action Plan by 6/30/23. The input will be incorporated into the 2024 Periodic Review process.
8	Incorporate an environmental justice assessment into the Energy & Climate Change Chapter work plan.	Education & Outreach	City's communication manager; Korean Women's Association; neighborhood associations; Community Services Advisory Board; Youth Council; Lakewood's Promise; Pierce County Sustainability Collaborative; Tacoma-Pierce County Health Department; WA State Department of Health	Part of 2024 Comprehensive Plan periodic review.	10	June 2024	The 2024 Comprehensive Plan periodic review Steering Committee, which includes community-based organizations (CBOs) representing historically disadvantaged populations, to complete review and feedback on Climate Change Chapter and Action Plan by 6/30/23. The input will be incorporated into the 2024 Periodic Review process.
9	Lakewood, as a member of the South Sound Military Communities Partnership (SSMCP), advocate for improvements to the I-5 corridor the Nisqually Delta at both the state and federal levels. Project has multiple factors: I-5 traffic congestion; sea level rise leading to increased flood risk; salmon habitat degradation; military readiness and natural security; environmental remediation; and Treaty rights of the Nisqually Tribe. *	Energy & Built Environment; Transportation	SSMCP partnerships (multiple local, state, federal agencies, and private parties). Governor Inslee, Sen Cantwell and Congresswoman Strickland all support the project as a priority for the state	Initial allocation from state funded grants - \$75M. Part of Move Ahead Washington. SSMCP in-house function.	10	Ongoing	Outcome of 2023 State Legislative Session: I-5 budget detail (\$75M) – WSDOT states they are unable to construct three roundabouts in the 2023-25 biennium (requested budget proviso; "if WSDOT unable to do work in 2023-25, funds will go to a local jurisdiction for execution".)

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10	Revise the Lakewood tree preservation code.	Energy & Built Environment and Carbon Sequestration	Internal; Ad hoc tree committee.	City Council approved one contract plus amendment. Total cost, \$81,550. Tree Code under review by City Council; tentative adoption date, October 17, 2022. Implementation = ~\$150K annually for contract arborist and associate planner FTE.	10	Tentative adoption date of October 17, 2022.	Adopted by City Council 11/7/22, effective 3/1/23. City is currently working to contract with Alan Haywood, Arborist & Horticulturist, LLC. City staff are able to utilize services on a case by case basis. Arborist funding through 2026 secured 5/31/23 from ARPA funds per City Council action
11	Explore the feasibility of reducing the City hall footprint from three floors to two floors. (Potentially reducing energy consumption.)	Energy & Built Environment	Internal	Contract approved by the City Council May 20, 2022 in the amount of \$121,863. Feasibility study underway; report to City Council scheduled for December 12, 2022.	10	December 2022/ January 2023	Ongoing.
12	Every two years, or as otherwise dictated by Washington State, update LMC Title 15, Buildings and Construction Codes to address hazards resulting from climate change.	Energy & Built Environment	WA State Building Code Council (SBCC); WA Assn. of Building Officials (WABO); Pierce County Master Builders Association; West Pierce Fire & Rescue	CED in-house function; part of existing budget.	10	Ongoing	ICC codes scheduled to change from 2018 to 2021 codes on October 29, 2023.
13	Support the implementation of the Tacoma-Pierce County Solid Waste Management Plan.	Waste Consumption; Education & Outreach	Pierce County; T-PC Health Department; Waste Connections; other Pierce County cities; Clover Park School District; Western State Hospital; Pierce College; Clover Park Technical College; Saint Clare Hospital	CED, CM, Legal, PRCS, PWE in-house function.	10	Ongoing (three-year timeframe)	Ongoing
14	Coordinate a regional electric vehicle (EV) infrastructure strategy with neighboring cities, Pierce County and the State*	Energy & Built Environment; Transportation	Pierce County; other Pierce County cities; TPU; PSE; Lakewood Light & Power	As of this writing, the City's involvement will be limited to coordination between energy purveyors, transit providers, and private investors.	10	2023-2024	Ongoing

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15	Develop/promote an urban forest management/master reforestation plan.	Energy & Built Environment;; Carbon Sequestration; Education & Outreach	Internal	Project would be initiated by the Evans School of Public Policy and Governance. Proposal to develop an initial program document. Cost \$1,800.	N/A – added per City Council direction	2022-2024	On June 7, 2023 The City Council accepted a report from the UW Evans School of Public Policy & Governance regarding establishing an urban forestry program over a 5 year period.  On May 31, 2023 the Council obligated \$340,000 of ARPA funds to help fund the report's recommendations for a certified arborist, tree assessment, and public outreach efforts through 2026.

In 2021 the City of Lakewood engaged students at the UW Evans School to survey residents about their opinions on climate change. This survey assessed Lakewood residents' degree of concern, as well as what potential evidence and effects they have already noticed. Lakewood received the full 105-page report from the UW Evans School in May 2023. Lakewood is also conducting a survey to understand residents' experience with housing and climate change which is set to close on June 11, 2023. This information will primarily be used to update the City's Comprehensive Plan in 2024 and can also be utilized in the drafting and implementation of a future Climate Change Action Plan.

For 2023, the City's PWE Department is pursuing a pilot street light dimming project. In the month of June, the City will be conducting a trial on lowering the power consumption for street lighting in the in the area identified in the map below.



The trial will occur over two weeks, with each week the lights being lowered at a different percent rate.

To lower the power consumption, the lights will be slightly dimmed, but it should not be noticeable to the naked eye. The affected neighborhood was notified by mail this week, June 7. Further, the City will send out a follow-up questionnaire after the trial has been completed. Comments shall also be sought through social media.

Once the trial period is over, we will examine all of the feedback and analyze the cost savings, as wells any public safety concerns, to ensure that implementing a dimming program throughout the Puget Sound Energy service area is beneficial to not only the City, but to the residents as well.

What We Know / What's Happening: The Energy and Climate Change Chapter (ECCC) of the Comprehensive Plan provided data from 2021 related to greenhouse gas emission sources, carbon sequestration, energy generation and use, and many other factors. This information has provided a foundation for the work we need to do and will assist the City in tracking and monitoring data as it changes over the coming years.

An interesting tool the City can utilize to monitor and acquire climate change data is Google Environmental Insights Explorer (EIE). According to the EIE website,

"Environmental Insights Explorer is a data and insights tool that uses exclusive data sources and modeling capabilities to help cities and regions measure emissions sources, run analyses, and identify strategies to reduce emissions-creating a foundation for effective action."

When visiting the EIE website and searching for Lakewood, certain climate change factors and estimates specific to our City are displayed. These include estimated total building emissions, transportation emissions (by year), estimated tree canopy coverage, and rooftop solar potential. EIE is a great tool that Lakewood can use to build a sustainable and resilient future. City of Lakewood Community Development Director, David Bugher, is currently working on a grant with Google for an in-depth traffic analysis using A.I. The outcome of this study would assist with ideas and programs to change traffic designs and reduce carbon emissions.

There is a great deal of information available that will assist Lakewood in developing a Climate Change Action Plan and doesn't necessarily require fancy software or consultants. For instance, a simple search of the Washington State Department of Licensing indicated that as of June 1, 2023, there are approximately 519 electric vehicles (EVs) registered in Lakewood as well as, 27 public charging stations. Although this may seem like a small percentage compared to the total number of vehicles registered in Lakewood, it still shines light on progress. EVs represent a substantial reduction in lifecycle greenhouse gas emissions compared to the average conventional vehicle and sales of EVs only continue to increase. Other public facing databases and agency websites may be able to provide staff with similar actionable data that can track our progress and assist in developing goals and policies related to climate change.

When we begin the first steps to drafting a climate change action plan, there is potential that staff may face a number of unique challenges specific to Lakewood. Planning for these challenges will assist in proactive measures to accurately report on future climate impacts. The following are challenges we anticipate to encounter:

- Changes in zoning and increased densities (likely beginning in 2024).
- How do we save trees and increase density?
- New development will increase costs- how does that fit in with the missing middle housing?
- Lakewood is considered a contract city (not full service) and it may be difficult to obtain data from utilities related to climate change.
- Lakewood could be considered a 'barbell city'. It may be more difficult and take longer to see changes in lower income areas.

- Outreach and engagement.
- Community attachment to historical preservation
- Military presence and compatibility
- Balancing economic development and industrial growth with climate change factors (i.e., increased truck traffic)

What we need to do: Beginning now, Lakewood will begin drafting a five-year climate change action plan which will act as a blueprint for City climate action, integrating climate change policies into all applicable areas of City operations and work with partners, communities, and residents. The plan will reflect Lakewood's priorities and commitments for climate action to residents and partners. Since climate change goals and policies are relatively new for Lakewood, this plan will likely appear basic but will become more refined over time. The plan will be updated every five years to reflect Lakewood's continuous learning approach to climate action with the understanding that climate change is an urgent local and global challenge which creates complex challenges. Lakewood will need to work hand in hand with local and state agencies and partners, as well as, promote community engagement to develop this action plan. It is intended that the first draft of the action plan will be completed in 2024 and will go before the Planning Commission for review prior to arriving back to City Council for decision making.

