Attachment C

Climate Element

Part 1 – Goals, Policies, and Implementation Actions

City of Tumwater 2025 Comprehensive Plan

Balancing Nature and Community: Tumwater's Path to Sustainable Growth

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CITY OF TUMWATER

Table of Contents

Acronyms and Abbreviations Used in Document

ASD – Administrative Services Department.

CBO – Community Based Organization.

CCA – The Climate Commitment Act (CCA) (Chapter 310, Laws of 2021) caps and reduces greenhouse gas emissions from Washington's largest emitting sources and industries, allowing businesses to find the most efficient path to lower carbon emissions. This program works alongside other critical climate laws and policies to help Washington achieve its commitment to reducing greenhouse gas emissions by 95% by 2050. The CCA also puts environmental justice and equity at the center of climate policy, making sure communities that bear the greatest burdens from air pollution today breathe cleaner, healthier air as the state cuts greenhouse gases. Finally, funds from the auction of emission allowances support new investments in climate-resiliency programs, fund clean transportation, and address health disparities across the state.

CDD – Tumwater Community Development Department

City – City of Tumwater

Commerce – Washington State Department of Commerce

County – Thurston County

CPAT – Climate Policy Advisory Team

DAHP – Washington State Department of Archaeology and Historic Preservation

EDC – Thurston Economic Development Council

EV – Electric Vehicle

EXD – Tumwater Executive Department

Fire & EMS – Fire and Emergency Medical Services Department.

FIN – Tumwater Finance Department

GHG – Greenhouse Gas

LID – Low Impact Development

PRFD – Tumwater Parks, Recreation, & Facilities Department

RCW – Revised Code of Washington

TCAT – Thurston Climate Action Team

TED – Tumwater Transportation & Engineering Department

TMC – Tumwater Municipal Code

Tribes – Nisqually Indian Tribe, Squaxin Island Tribe, and the Confederated Tribes of the Chehalis Reservation

TRPC – Thurston County Regional Planning Council

UFMP – Urban Forestry Management Plan

WRS – Tumwater Water Resources & Sustainability Department

WSDOT – Washington State Department of Transportation

Key Terms and Definitions

15-minute neighborhood: An urban planning concept referring to neighborhoods in cities in which most daily necessities, services, and amenities (e.g., work, education, health care, shopping, recreational

opportunities) can be reached by a 15-minute walk, bicycle ride, or public transportation trip. These neighborhoods tend to be relatively walkable and support a greater baseline of residential density.

Climate: The "average weather" generally over a period of three decades. Measures of climate include temperature, precipitation, and wind.

Climate change: Any significant change in the average climate of a region lasting for decades or longer. Can be measured through substantial changes in temperature, precipitation, or wind. Climate change may result from natural factors and from human activities that change the atmosphere's composition and land surface.

Climate refugia: Areas that continue to resist the impacts of anthropogenic climate change, allowing valued and culturally significant physical, ecological, and socio-cultural resources to continue to survive and even thrive amidst a changing landscape.[1]

Environmental Justice (EJ): The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to environmental laws, rules, and policies (RCW) 70A.02.010(8). Environmental justice includes addressing unfair environmental and health impacts in all laws, rules, and policies by:

- prioritizing vulnerable populations and overburdened communities;
- the equitable distribution of resources and benefits; and
- eliminating harm.

Food Justice: Assumes consistent access to nutritious, affordable, and culturally relevant food to be a human right that should be secured and protected.

Frontline Community[2]: Those communities that experience the effects of climate change "first and worst" while also having significantly lower capacity to adapt and reduced access to resources and political power to respond to those risks. Though not limited to these groups, frontline communities generally include communities of color, Indigenous peoples, and low-income communities. These communities have also not historically had access to City decision making processes.

[1] Morelli, T.L.; Millar, C. 2018. Climate Change Refugia. USDA Forest Service Climate Change Resource Center. https://www.fs.usda.gov/ccrc/topics/climate-change-refugia

[2] *In the Climate Element the term "frontline community" is preferred as it does not carry the disempowering and othering connotations of the terms "overburdened community" and "vulnerable population." However, the latter terms carry legislative meaning, with precise definitions in Washington State law and policies that direct funding for and engagement with these groups. All three terms will be used throughout the goals, policies, and implementation actions contained in this Element. "Frontline communities" will be the preferred term where the legislative context is not relevant, while "overburdened community" and "vulnerable population" will be used where the precise definitions are key to enacting the policy.*

Gray-green infrastructure: stormwater management systems used in places where gray infrastructure cannot be entirely phased out without losing functionality, but some green elements can be introduced to increase the resilience of the system and improve the local ecology.

Green infrastructure: Stormwater management systems that mimic natural systems, capturing and absorbing or diverting rainwater where it falls.

Greenhouse gas (GHG): Any gas that absorbs heat in the atmosphere; examples include carbon dioxide, methane, nitrous oxide, ozone, and water vapor.

Managed retreat: The voluntary movement and transition of communities away from regions that are likely to become unsustainable for life due to climate change impacts. Primarily a tool used in coastal regions to move communities away from sea level rise impacts, but increasingly a tool used in planning for other climate hazards.

Native species: Any plant, fungus, or animal species native to our area. In the US, this only includes species present in the region prior to the arrival of European settlers.[3]

Overburdened Community[4]: According to RCW 70A.02.010 (11), denotes a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts, and includes, but is not limited to, highly impacted communities as defined in RCW 19.405.020.

Passive survivability: Building to ensure that residences will remain at a safe temperature for occupants if the power goes out and that they will overall require less power to keep at a regulated temperature. It can also entail building single-family residences with one room designed to maintain comfortable temperatures or multifamily residences with a designated common area designed to serve this same function. Building for passive survivability also reduces demand on local energy infrastructure.

Vulnerable Populations[5]: According to RCW 70A.02.010 (14), includes population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms, due to: adverse socioeconomic factors, high housing and transportation costs relative to income, limited access to nutritious food and adequate health care, linguistic isolation, and other factors that negatively affect health outcomes and increase vulnerability to the effects of environmental harms; and sensitivity factors, such as low birth weight and higher rates of hospitalization. Vulnerable populations can include but are not limited to racial or ethnic minorities, low-income populations, populations disproportionately impacted by environmental harm, and populations of workers experiencing environmental harm.

[3] United States Department of Agriculture, n.d. "What is a native plant?" https://www.usda.gov/peoples-garden/gardening-advice/why-native-species-matter
[4] See Note 1
[5] See Note 1

1. Introduction

The Climate Element is part of Tumwater's Comprehensive Plan that was created to meet the State Growth Management Act (Chapter 36.70A RCW) requirements to adapt to and mitigate the effects of a changing climate.

This section of the Climate Element specifies goals, policies, and actions meant to set forth a direction to advance equity, sustainability, and resilience in Tumwater. The goals, policies, and actions also serve to ensure coordination with separate Comprehensive Plan Elements, regional plans, and County-Wide Planning Policies. Additionally, they serve as the plan for implementing certain actions within the Climate Element.

A. How to Read this Element

Tumwater's Vision, Mission, and Belief Statements provide overarching direction for the future of the community are found in the Comprehensive Plan Summary.

The Summary of Element Goals and Strategies provides a high-level overview of the Climate Element's sixteen goals and supporting policies.

2. Growth Management Act

The State Growth Management Act (Chapter 36.70A RCW) requires that Tumwater shows that each Element in its Comprehensive Plan meets the relevant fifteen planning goals contained within the Act. The fifteen goals guide the development and adoption of Tumwater's Comprehensive Plan and development regulations.

The following is a summary of how the new Climate Element addresses the goal related to climate change and resiliency. The state legislature added this goal in 2023.

15. ***Climate change and resiliency***. *Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies under RCW 36.70A.210 and chapter 47.80 RCW adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.*

The Conservation Element, Land Use Element, and Transportation Plan of the Comprehensive Plan will need to address this as a new goal in coordination with the new Climate Element. A new overarching Comprehensive Plan goal will address the dual goals of increasing climate resiliency and mitigating Tumwater's contributions to climate change by promoting sustainability, reducing pollution, promoting healthy habitats, and supporting clean air and water.

3. County-Wide Planning Policies

The Growth Management Act requires that comprehensive plans be consistent with Thurston County's County-Wide Planning Policies, as amended in 2015. The sections of the County-Wide Planning Policies relevant to this Element are cited below. All County-Wide Planning Policies are adopted as Appendix B to the Comprehensive Plan.

The Climate Element has goals, policies, and actions that address County-Wide Planning Policies 1.1 through 1.14. These goals, policies and actions support a regional vision for sustainable communities which will thrive in the face of climate change impacts and lead efforts to mitigate future impacts.

II. Urban Growth Areas

2.2 The boundaries of designated urban growth areas must meet the following criteria:

[…]

d. be compatible with the use of designated resource lands and critical areas.

[…]

III. Promotion of Contiguous and Orderly Development, Provision of Urban Services, and Protection of Rural Areas

3.4 Provide Capacity to accommodate planned growth by:

[…]

b. Protecting ground water supplies from contamination and maintaining groundwater in adequate supply by identifying and reserving future supplies well in advance of need.

[…]

VII. Economic Development and Employment

7.2 Support the recruitment, retention, and expansion of environmentally sound and economically viable commercial, public sector, and industrial development and resource uses, including the provision of assistance in obtaining funding and/or technical assistance.

Resource uses and resource land protection are addressed in Chapters 2 through 4.

7.5 Build a vital, diverse, and strong local economy, including job opportunities that support community and household resilience, health, and well-being, by;

[…]

f. Nurturing urban and rural agricultural and food-oriented businesses.

g. Protecting resource lands.

h. Encouraging the utilization and development of areas designated for industrial use, consistent with the environmental policies in these countywide policies.

i. Connecting economic health with personal health and well-being and the advancement of environmental health.

j. Adding incentives for business to demonstrate their environmental sustainability including reduction in greenhouse gas emissions.

[…]

X. Environmental Quality

10.1 Recognize our dependence on natural systems and maintain a balance between human uses and the natural environment.

10.2 Establish a pattern and intensity of land and resource use that is in concert with the ability of land and resources to sustain such use, reduce the effects of the built environment on the natural environment, conserve natural resources, and enable continued resource use, through:

[…]

c. Planning for the amount of population that can be sustained by our air, land and water resources without degrading livability and environmental quality.

[…]

10.3 Protect the soil, air, surface water, and groundwater quality, including through:

Reducing dependence on the use of chemicals and other products that pollute and, when their use is necessary, minimizing releases to the environment.

Ensuring adequate clean water is available to support household and commercial needs while sustaining ecological systems through conservation, balancing of uses, and reuse.

Protecting ground and surface water and the water of the Puget Sound from further degradation by adopting and participating in comprehensive, multi-jurisdictional programs to protect and monitor water resources for all uses.

10.5 Acknowledge that changing weather and climate patterns will impact the human, natural, and built environments and plan for impact such as increase wildfire, flooding, and sea-level rise.

10.6 Protect and restore natural ecosystems, such as, forests, prairies, wetlands, surface and groundwater resources, that provide habitat for aquatic and terrestrial plants and animals.

10.7 Provide for public access to natural resource lands, while ensuring that uses and economic activity, which are allowed within those lands, are sustainable.

10.8 Provide for parks and open space and maintain significant wildlife habitat and corridors.

4. Element Goals and Policies

A. How to Read These Tables

The sixteen goals of this Climate Element are guided by the County-wide planning goals discussed above, Tumwater's general goals, and by the vision of a Tumwater that is a vibrant city that fosters a sense of place, active transportation, local business prosperity, and provides a safe environment for our coming climate challenges.

The Climate Element goals and policies are not in priority order.

Appendix A provides a list of the draft implementation actions by goal and policy that will be considered when developing annual work programs for implementing the Climate Element's goals and policies.

Leads

Each of the Climate Element's policies and draft implementation actions include the "lead." In most cases, the work will require multiple city departments working together. See the list of acronyms to decipher the lead city department(s).

Period

Each of the Climate Element's policies and draft implementation actions is associated with a time period, titled "period" on the tables below. This may include estimated start dates, the estimated length of time to complete an action, and/or target completion dates. Some actions are ongoing with no set target completion date. All dates included in the period column assume a best-case scenario where all necessary funding and staff capacity are available. More final dates, inclusive of any challenges faced, will be assigned to actions as they are placed on annual work programs by the lead city department for the policies or actions.

B. Overarching Climate Goals

Goal CL-1 Increase Tumwater's capacity to implement climate action and adaptation priorities.

The goals and policies contained in this Element will only lead to effective climate mitigation and adaptation if Tumwater devotes appropriate resources to implement all aspects of the Element.

Policies		Lead	Period
CL-1.1	**Fully staff City positions needed to support the actions outlined in the Climate Element.**	WRS, EXD	**Start:** 2025
CL-1.2	**Develop a program funding strategy to support equitable access to climate mitigation and adaptation programs developed by Tumwater.**	WRS, EXD	**Start:** 2025
CL-1.3	**Educate City Staff and the public on the Climate Element's goals, policies, and actions.**	WRS	**Start:** 2025

Goal CL-2 Advance environmental justice by providing all members of the Tumwater community with an equitable opportunity to learn about climate impacts, influence policy decisions, and take actions to enhance community resilience.

Environmental justice must be central to any effort to mitigate and adapt to climate change. Tumwater must create opportunities for all members of the community to make meaningful changes to climate policy and must also strive to ensure frontline communities have access to resources to adapt to climate impacts.

Policies		Lead	Period
CL-2.1	**Work with CBOs and community organizers to conduct intentional outreach with frontline communities to create opportunities for equitable engagement in climate adaptation, mitigation, and education.**	WRS, EXD	Ongoing

Policies		Lead	Period
CL-2.2	**Prioritize the people of Tumwater and their needs, values, and goals in all future planning efforts by developing and implementing all climate-related adaptation and mitigation tasks in collaboration with equitable representation from all Tumwater communities.**	WRS	Ongoing
CL-2.3	**Develop programs and resources to promote equitable financial access to climate resilience and mitigation activities.**	WRS, Finance, & EXD	**Start:** 2026

Goal CL-3 Address that changing weather and climate patterns driven by human-generated emissions will affect every aspect of life in Tumwater, and plan for impacts such as increased heat, wildfire, and flooding while working to reduce local emissions.

This goal is at the heart of why Tumwater is climate planning. Human-generated emissions are driving unprecedented climate changes, and that fact drives the Greenhouse Gas Reduction Sub-Element, whose goals strive to curb human emissions. Simultaneously, Tumwater and all communities globally must prepare for the inevitable impacts already set in motion.

Policies		Lead	Period
CL-3.1	**Assess Tumwater's vulnerability to climate change.**	WRS	**Start:** 2027
CL-3.2	**Address climate change impacts in all Tumwater planning efforts.**	WRS, CDD	**Start:** 2028

C. Greenhouse Gas Reduction Sub-Element Goals

This sub-element contains five goals that aim to help Tumwater reach its new goal of net-zero emissions by 2045, ahead of the State's emissions target. The policies and actions in the sub-element focus on continuing Tumwater's progress on addressing climate mitigation.

1) Greenhouse Gas Reduction Targets

Under RCW 36.70A.070, cities and counties that are required to prepare Climate Elements as part of their Comprehensive Plans must include a sub-element on greenhouse gas emissions reduction. Tumwater's Greenhouse Gas Reduction Sub-Element dictates Tumwater's approach to eliminating Greenhouse Gas

emissions towards achieving net-zero emissions by 2045.

Tumwater has identified specific interim targets for municipal emissions (i.e., emissions from City-owned assets, operations, and services) and community-wide emissions (i.e., emissions from various sectors across Tumwater, including but not limited to residential, commercial, and transportation sectors).

Community-wide GHG Emissions Targets

- Reduce community-wide emissions by 45% from 2023 levels by 2030, and 70% by 2040.

- Achieve net-zero community-wide emissions by 2045.

Municipal GHG Emissions Targets

- Reduce municipal emissions by 50% from 2023 levels by 2030.

- Achieve net-zero municipal emissions by 2045.

2) Greenhouse Gas Goals and Policies

The goals and policies identified below are designed to move Tumwater towards these emissions reduction milestones. As with other components of this Climate Element, these goals and policies were developed based on present information and community feedback, but they are subject to revision over time as regulations and technology evolve.

Goal CL-4 Reduce greenhouse gas emissions from all building types through energy conservation measures prioritizing the deployment of financial resources and programs that help finance or subsidize improvements across Tumwater.

Greenhouse gas emissions from buildings and energy use account for over half of the community-wide emissions across Thurston County. This presents significant opportunities for action and impact, which can include prioritizing energy conservation measures and funding programs and incentives that will reduce Tumwater's municipal and community-wide greenhouse gas emissions. Community members expressed support for energy efficiency measures to provide financial benefits, particularly for renters and low-income residents.

Policies		Lead	Period
CL-4.1	**Reduce energy use across building types.**	WRS, CDD	**Start:** 2025 Ongoing
CL-4.2	**Reduce energy use in existing residential buildings.**	WRS, CDD	**Start:** 2025 Ongoing
CL-4.3	**Reduce energy use in existing nonresidential buildings.**	WRS, CDD	**Start:** 2025 Ongoing

Policies		Lead	Period
CL-4.4	**Reduce energy use in new construction, redevelopment, and deconstruction.**	WRS, CDD	**Start:** 2025
CL-4.5	**Increase energy efficiency in manufactured home parks and RV parks/campgrounds.**	WRS, CDD	**Start:** 2027
CL-4.6	**Convert to alternative fuel sources.**	WRS, CDD	**Start:** 2025 Ongoing

Goal CL-5 Expand the use of on-site renewable energy technology (e.g., solar photovoltaics, battery storage, etc.) across all building types through providing funds, code changes, and educational programs.

Local on-site renewable technology, such as solar photovoltaics and battery storage, will provide increased renewable energy options to Tumwater community members. Additionally, the development of local renewable energy resources strengthens Tumwater's resilience during future extreme weather events. Developing local renewable energy resources can also strengthen the local economy through job creation.

Policies		Lead	Period
CL-5.1	**Increase the production and storage of local renewable energy.**	WRS, CDD	**Start:** 2025

Goal CL-6 Reduce greenhouse gas emissions by making it easier for people to use and shift to low-/zero-carbon transportation modes through policy, programming, and regional collaborations.

Transportation is the second largest source of greenhouse gas emissions in Thurston County. Tumwater can significantly reduce emissions by creating policies and programs that support zero emissions transportation modes, including increasing the number of electric vehicles and charging stations throughout Tumwater and encouraging active transportation such as biking and walking. Community members strongly expressed the desire for improved sidewalks and an increased number of bike lanes to enable active transit.

	Policies	Lead	Period
CL-6.1	**Promote increased use of active forms of travel such as bicycling, walking, and other nonmotorized options.**	TED	**Start:** 2026 Ongoing
CL-6.2	**Increase adoption of electric vehicles.**	WRS	Ongoing
CL-6.3	**Facilitate low-carbon options for movement into and through Tumwater.**	CDD, TED	**Start: 2026** Ongoing

Goal CL-7 Reduce vehicle miles traveled by using permitting, regulatory, and other land use tools to promote multimodal transportation options and the use of public transit.

In addition to increasing the adoption of electric vehicles and encouraging active transportation in Tumwater, increasing multimodal options and public transit ridership can greatly affect Tumwater's greenhouse gas emissions. Promoting public transit ridership includes short term efforts, such as public awareness campaigns and expand transit lines, and long-term efforts, such as urban planning to reduce urban sprawl. Land use tools, such as street network connectivity improvements, can also contribute to reduced vehicle miles traveled, which in turn lead to reduced emissions, air pollution, and traffic congestion.

	Policies	Lead	Period
CL-7.1	**Continue land use policies that support increased urban density and efficient transportation networks and reduce urban sprawl.**	CDD	Ongoing
CL-7.2	**Increase efficiency of the transportation system.**	TED	Ongoing

Goal CL-8 Strengthen existing policy and regulations to deploy and enhance natural carbon solutions that are ecosystem-appropriate, store carbon, and offer co-benefits such as pollution reduction, wildlife habitat, and climate resilience.

Natural carbon solutions play an important role in the local environment by sequestering carbon through tree canopy and natural open space. In conjunction with reducing greenhouse gas emissions at the source, natural carbon solutions reduce atmospheric carbon, pollution, and reduce urban heat. Community members have expressed strong support of preserving the tree canopy in Tumwater.

	Policies	Lead	Period
CL-8.1	**Preserve tree canopy and support habitat restoration and conservation to sequester carbon.**	WRS, CDD	Ongoing

D. Resilience Sub-Element Goals

This section contains eight goals that aim to help Tumwater guide climate adaptation efforts to protect its communities against unavoidable climate impacts. The policies and actions in this element focus on expanding and improving Tumwater's work on Climate Adaptation.

Goal CL-9 Design, plan, and upgrade buildings and energy infrastructure to accommodate renewable energy opportunities, keep the community safe, and withstand and recover from extreme weather and natural hazards worsened by climate change.

Tumwater's energy infrastructure and buildings need to be protected against projected climate impacts, creating safe and reliable space for community members. Renewable energy does not just offer climate mitigation benefits: locally generated and stored renewable energy is also more resilient under an uncertain climate future.

	Policies	Lead	Period
CL-9.1	**Require that planned facilities, utilities, and infrastructure projects and existing vulnerable sites be built or hardened to avoid or withstand climate impacts, including extreme heat, extreme precipitation, and sea level rise.**	CDD, WRS	**Start:** 2028
CL-9.2	**Plan energy infrastructure to be able to integrate with an increase in renewable energy sources, including increasing energy storage capacity to improve energy grid resilience.**	CDD, WRS, Fire and EMS	**Start:** 2026
CL-9.3	**Require buildings in high-risk areas[6] to be designed and built to be resilient to natural hazards and extreme weather worsened by climate change.**	CDD, WRS	**Start:** 2028

[6] High risk areas to be identified by Tumwater's Comprehensive Vulnerability Assessment, which should be completed by 2028. Weatherization and hardening building codes should be developed based on identified risks and land use designations of at-risk land parcels.

Policies		Lead	Period
CL-9.4	**Encourage property owners to increase the resilience of existing buildings to natural hazards and extreme weather worsened by climate change.**	CDD, WRS	**Start:** 2028
CL-9.5	**Work with Puget Sound Energy to improve the safety and reliability of infrastructure vulnerable to climate change.**	WRS, CDD	**Start:** 2026

Goal CL-10 Increase preparedness for acute climate impacts and improve the resilience of Tumwater's people and systems against climate hazards.

Research has shown that climate change impacts frontline communities first and worst, while these communities also contribute the least to worsening climate change. System-wide changes need to be implemented to protect all of Tumwater's community members from both chronic and acute climate harm, with particular attention to frontline communities.

Policies		Lead	Period
CL-10.1	**Improve community outreach on and response capabilities for climate health and hazard issues, prioritizing frontline communities to address economic, social, and health disparities.**	WRS & EXD	**Start:** 2025
CL-10.2	**Develop resources to mitigate the risks posed by extreme heat.**	WRS, Fire & EMS	**Start:** 2026
CL-10.3	**Increase regional wildfire resilience, preparedness, and response capabilities in Tumwater.**	WRS, Fire and EMS	**Start:** 2030
CL-10.4	**Collaborate with regional partners to develop resources that address projected increases in risks and impacts associated with climate change.**	WRS, Fire and EMS	**Start:** 2026
CL-10.5	**Improve community resilience, health equity, and environmental justice by striving to ensure that all community members can walk or roll to public green spaces within ½ a mile and connected by sidewalks or protected walkways.**	TED, WRS, PRFD	**Start:** 2026

Policies	Lead	Period
CL-10.6 Position Tumwater to qualify for more funding opportunities to adapt to climate impacts.	WRS	**Start:** 2027
CL-10.7 Work with the Thurston County Public Health Department to increase local understanding of how climate change impacts vector-borne disease outbreaks. Make a plan to protect against projected increases in frequency and severity.	WRS	**Start:** 2027
CL-10.8 Develop programs that enable and empower community members to protect themselves from poor air quality.	WRS	**Start:** 2027
CL-10.9 Work with Thurston County Emergency Management to improve access to the resources needed for community members to shelter in place or to adequately reach temporary shelter.	Fire and EMS, WRS	**Start:** 2025
CL-10.10 Increase language accessibility of emergency services, plans, and resources.	EXD	**Start:** 2025

Goal CL-11 Preserve, protect, and sustain cultural sites and resources in alignment with the values and needs of Tribes, traditional stewards, and frontline communities.

Tumwater is built on land traditionally stewarded by the Coast Salish people. Their descendants in the Nisqually, Squaxin Island, Chehalis, and Cowlitz Tribes continue to live on and steward the land today but are also unfairly impacted by climate change and excluded from key climate decision-making. Tumwater must elevate the goals, values, and needs of the region's Indigenous communities.

Policies	Lead	Period
CL-11.1 Enhance partnership between the Tribes and Tumwater, integrating Tribal expertise, opinions, and values into climate planning efforts, projects, and programs.	EXD, WRS,	**Start:** 2025

Policies	Lead	Period
CL-11.2 In accordance with Tribal treaty rights, protect, enhance, and restore ecosystems and culturally important consumptive and non-consumptive resources including foods, medicinal plants, places, and materials that could be adversely impacted by climate change.	WRS, PRFD	**Start:** 2025
CL-11.3 Collaborate with the Tribes to prioritize the preservation of archaeological sites and traditional cultural properties that are vulnerable to climate impacts.	WRS, CDD, PRFD	**Start:** 2026

Goal CL-12 With climate, growth, and environmental changes in mind, identify and elevate the protection of key habitats, ecosystem services, and wildlife corridors.

Protecting Tumwater's local ecosystems is key to building both ecological and community resilience to expected climate impacts. Resilient ecosystems will help vital native species to survive and thrive in the coming decades, while also continuing to provide key ecosystem services to Tumwater's human residents.

Policies	Lead	Period
CL-12.1 Manage Tumwater's urban forest in line with the most recent Urban Forestry Management Plan and current climate projections and guidance.	WRS	**Start:** 2025
CL-12.2 Protect, restore, and connect streams, estuaries, wetlands, floodplains, and other land and habitats that are next to rivers and streams (i.e., riparian ecosystems) to increase resiliency to climate change and reduce flood risk.	WRS, CDD	**Start:** 2026
CL-12.3 Manage Tumwater's natural resources to protect, restore, and connect native ecosystems and foster habitats that are resilient to climate change.	CDD, WRS	**Start:** 2030

Policies		Lead	Period
CL-12.4	**Increase the climate resilience of native fish species and aquatic ecosystems by reducing the impact of threats such as aquatic invasive species, invasive plants, pollutants, and changes in seasonal water flow.**	WRS	**Start:** 2025
CL-12.5	**Advocate for prioritizing maintenance of habitat integrity and function when working with regulatory agencies to determine allowed activities and uses within protected wetlands and Fish and Wildlife Habitat Conservation Areas.**	WRS	**Start:** 2025
CL-12.6	**Take early action to eliminate or control noxious invasive species, including insects and plants that take advantage of climate change, especially where invasives threaten native species or ecosystem function.**	WRS, PRFD, TED	**Start:** 2026

CL-13 Promote zoning and development decisions that support compact urban development and city-wide resilience, including a resilient local economy.

Compact, walkable, and transit-oriented cities are vital to building community resilience. Zoning decisions should support this future, while also striving to foster equity in decision-making.

Policies		Lead	Period
CL-13.1	**Form a working group to secure Tumwater's economic resilience regarding climate impacts.**	WRS	**Start:** 2025
CL-13.2	**Restore and maintain critical areas, non-regulated open space areas, and the floodplain to maximize climate resilience and ecosystem benefits.**	WRS	**Start:** 2026
CL-13.3	**Identify and implement strategies for reducing residential development pressure in the wildland-urban interface.**	CDD	**Start:** 2027

Policies		Lead	Period
CL-13.4	**Encourage the location of new development in areas where exposure to climate hazards is low and ecological impacts are minimized.**	CDD	**Start:** 2025
CL-13.5	**Support efforts of local businesses to bolster climate preparedness and continuity of operations.**	EXD, WRS	**Start:** 2035
CL-13.6	**In areas with significant vulnerability to climate hazards, facilitate and support long-term community visioning including consideration of managed retreat.**	CDD, WRS	**Start:** 2026

Goal CL-14 Strive to create a local transportation system, including infrastructure, routes, and active travel modes, which fosters connectivity and can withstand and recover quickly from climate impacts.

Although the Tumwater Transportation Plan lays out a framework for an equitable, accessible, and multimodal future for Tumwater, it is important to address the intersection of Transportation planning and climate resilience.

Policies		Lead	Period
CL-14.1	**Improve street connectivity, transit accessibility, and walkability, including sidewalks and street crossings, to ease emergency evacuation.**	TED	**Start:** 2026
CL-14.2	**Prioritize access to and restoration of water bodies and water-adjacent sites when designing and siting new and expanded transportation infrastructure.**	TED, WRS	Ongoing
CL-14.3	**Improve habitat connectivity wherever possible when constructing and redeveloping roadways.**	TED, WRS	**Start:** 2028
CL-14.4	**Facilitate quick recovery of the whole multimodal transportation system after disruption from disasters or extreme weather events.**	TED	**Start:** 2028

Goal CL-15 Protect and improve water quality and availability.

Climate change will cause drastic and uncertain impacts to regional watersheds. Tumwater needs to prepare for potential droughts, changes in seasonal water flow, and impacts to aquatic life.

Policies	Lead	Period
CL-15.1 Manage Tumwater's water sustainably, ensuring there is adequate quantity and quality of water available for future generations.	WRS	Ongoing
CL-15.2 Improve Tumwater's drought resilience through water reclamation and conservation measures, drought-tolerant landscape design, and advocacy.	WRS, CDD	**Start:** 2025
CL-15.3 Develop and implement a comprehensive drought resilience strategy that factors in projected climate impacts and sets action levels for different drought stages.	WRS	**Start:** 2026
CL-15.4 Increase the use of Low-Impact Development infrastructure projects that help capture, filter, store, and reuse stormwater runoff.	WRS	**Start:** 2025
CL-15.5 In coordination with the Land Use and Lands for Public Purposes Element, assess current and projected future water demand and water storage.	WRS	Ongoing

Goal CL-16 Expand local food justice to address climate impacts and increase access to nourishing, affordable, culturally appropriate, and climate-friendly foods while expanding local use of composting.

Climate change will have inevitable impacts on access to nourishing and culturally appropriate foods, but Tumwater has an opportunity to secure a sustainable food future. At the same time, Tumwater can address waste reduction goals by shifting food waste into composting waste streams.

Policies		Lead	Period
CL-16.1	**Improve local food justice through collaboration, education, and advocacy.**	WRS	**Start:** 2025
CL-16.2	**Increase composting in urban agriculture and by private residences.**	WRS	**Start:** 2026
CL-16.3	**Expand consistent access to food for Tumwater community members.**	WRS, CDD	**Start:** 2025

Appendix A Draft Implementation Actions

Each of the goals and policies in Chapter 4 will require Tumwater to take specific actions to implement over the course of the 20 year term of the Comprehensive Plan.

The draft implementation actions in the tables below were developed in coordination with the CPAT, the community, city staffn, and other agencies. These implementation actions are intended to serve as a vetted resource for developing annual City work programs to address climate change across multiple departments.

As the Comprehensive Plan is put into action over the next twenty years, the draft implementation actions will change as new, unforeseen opportunities emerge: new ones may be added, proposed ones may be modified or replaced by other actions. These draft implementation actions currently represent best available science, best practices and lessons learned from other jurisdictions in North America, and have been subject to review and edits by members of the public and City Council through the Element drafting process.

The draft implementations actions below are intended to be draft work program items that serve to implement the goals and policies of the Element. The draft implementation actions will need further refinement before they are incorporated into annual City work programs.

Draft implementation actions that can only be undertaken by other entities are not included in this plan.

A. How to Read These Tables

The Climate Element goals, policies, and the implementation actions associated with them are not in priority order.

Leads

Each of the Climate Element's policies and draft implementation actions include the "lead." In most cases, the work will require multiple city departments working together. See the list of acronyms to decipher the lead city department(s).

Period

Each of the Climate Element's policies and draft implementation actions is associated with a time period, titled "period" on the tables below. This may include estimated start dates, the estimated length of time to complete an action, and/or target completion dates. Some actions are ongoing with no set target completion date. All dates included in the period column assume a best-case scenario where all necessary funding and staff capacity are available. More final dates, inclusive of any challenges faced, will be assigned to actions as they are placed on annual work programs by the lead city department for the policies or actions.

Priority

The Climate Element's policies and draft implementation actions have been prioritized by the CPAT into different categories. Those policies and draft implementation actions are marked

with the appropriate icon if they fall into any of the categories below.

High Impact Climate Actions. CPAT prioritized actions because they will drive the greatest amount of emissions reductions and/or reduce casualties due to climate hazards immediately or in the near term.

Easy Wins. CPAT prioritized actions because they will be easier to accomplish, allowing the Tumwater community to feel motivated by real and visible progress.

Futureproofing for Everyone. CPAT prioritized actions because they will help to untangle potential future conflicts and allow the City to create policies and legislate on the side of climate action.

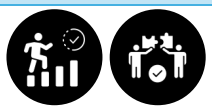
Everyday concerns (equity). CPAT prioritized action because they create a more equitable and just community immediately or in the near-term, addressing issues of economic injustice and making it possible for Tumwater's community members to access basic needs.

Building longevity. CPAT prioritized action because they create a more equitable, just, and resilient community in the long term but require action now to build that future.

B. Overarching Climate Goals

Goal CL-1 Increase Tumwater's capacity to implement climate action and adaptation priorities.

Policies and Implementation Actions	Lead	Period	Priority
CL-1.1 Fully staff City positions needed to support the actions outlined in the Climate Element.	WRS, EXD	**Start:** 2025	
CL-1.1.1 Identify future staffing needs to implement the Climate Element and reach state mandated targets.	WRS, EXD	**Start:** 2025 Ongoing Every 2 years	

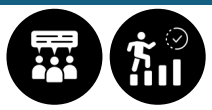
Policies and Implementation Actions	Lead	Period	Priority
CL-1.1.2 Fill any existing vacant positions that will allow implementation of Climate Element actions, and post and fill any positions identified in CL-1.1.1.	WRS, EXD	**Start:** 2026 Ongoing Every 2 years	
CL-1.1.3 Utilize creative staffing solutions such as AmeriCorps, Climate Corps, Civic Spark, and fellowships.	WRS, EXD	**Start:** 2027	
CL-1.2 Develop a program funding strategy to support equitable access to climate mitigation and adaptation programs developed by Tumwater.	WRS, EXD	**Start:** 2025	
CL-1.2.1 Identify the cost to implement the Climate Element and determine funding opportunities and needs.	WRS, EXD	**Start:** 2025 Ongoing Every 2 years	
CL-1.3 Educate City Staff and the public on the Climate Element's goals, policies, and actions.	WRS	**Start:** 2025	
CL-1.3.1 Develop training materials for Tumwater employees on the Climate Element. Require employees to undergo training and offer opportunities to ask clarifying questions.	WRS	**Start:** 2025 Ongoing	
CL-1.3.2 Develop educational outreach materials on the Climate Element to share with members of the Tumwater community so that they can learn how they can be involved in future climate planning efforts and how they will be impacted by forthcoming policies and be empowered to help implement the Climate Element.	WRS	**Start:** 2025 Ongoing	

Goal CL-2 Advance environmental justice by providing all members of the Tumwater Community with an equitable opportunity to learn about climate impacts,

influence policy decisions, and take actions to enhance community resilience.

Policies and Implementation Actions	Lead	Period	Priority
CL-2.1 Work with CBOs and community organizers to conduct intentional outreach with frontline communities to create opportunities for equitable engagement in climate adaptation, mitigation, and education.	WRS, EXD	**Start:** 2025	
CL-2.1.1 Build and support partnerships with existing organizations (i.e., CBOs) that have the capacity and existing relationships needed to convene diverse coalitions of community members and collaboratively empower their communities to develop and implement climate resilience and mitigation actions and work to address underlying disparities that impact these communities.	Whole City	**Start:** 2025 Ongoing	
CL-2.1.2 Create and implement tailored outreach and education initiatives that will empower frontline communities to respond to climate change threats.	WRS	**Start:** 2025 Ongoing	
CL-2.1.3 Attend pop-up events with existing CBOs and hold focus groups, office hours, and other events to build trust in both group settings and one-on-one with Tumwater's frontline community members.	WRS	**Start:** 2025 Ongoing	
CL-2.1.4 Conduct outreach and listening sessions in frontline communities to understand existing needs and opportunities and to educate on projected climate impacts.	WRS & EXD	**Start:** 2026 Ongoing	

Policies and Implementation Actions	Lead	Period	Priority
CL-2.2 Prioritize the people of Tumwater and their needs, values, and goals in all future planning efforts by developing and implementing all climate-related adaptation and mitigation tasks in collaboration with equitable representation from all Tumwater communities.	WRS	Ongoing	
CL-2.2.1 Prioritize recruiting frontline community members most impacted by climate change when forming any City of Tumwater working group, committee, or task force on climate-related issues. Strive to form all working groups and committees with equitable representation.	WRS	**Start:** 2025 Ongoing	
CL-2.2.2 Plan and conduct community engagement activities to co-create all policies and tasks with the community and to share new plan information upon completion and update throughout implementation.	WRS	**Start:** 2025 Ongoing	
CL-2.3 Develop programs and resources to promote equitable financial access to climate resilience and mitigation activities.	WRS, Finance, & EXD	**Start:** 2026	

Policies and Implementation Actions	Lead	Period	Priority
CL-2.3.1 Identify funding sources for subsidies for frontline communities to offset costs associated with climate impacts and mitigation actions. Covered funding could include potential cost increases associated with changing to non-fossil-fuel energy sources, increased energy usage to maintain livable indoor temperatures, and home hardening projects.	WRS, Finance, & EXD	**Start:** 2026 **Complete:** est. 1-2 years[7]	

Goal CL-3 Address that changing weather and climate patterns driven by human-generated emissions will affect every aspect of life in Tumwater, and plan for impacts such as increased heat, wildfire, and flooding while working to reduce local emissions.

Policies and Implementation Actions	Lead	Period	Priority
CL-3.1 Assess Tumwater's vulnerability to climate change.	WRS	**Start:** 2027	
CL-3.1.1 Conduct a comprehensive Vulnerability Assessment that considers climate impacts to communities, physical assets, and City operations and services, including impacts from extreme heat and flooding.	WRS	**Start:** 2027 **Complete:** est. 1 year	
CL-3.2 Address climate change impacts in all City planning efforts.	WRS, CDD	**Start:** 2028	

[7] Estimated times required for completing each action are estimates only based on current projected funding, staff capacity, and alignment with broader City goals. Unforeseen circumstances could cause timelines to be extended beyond estimated completion timelines.

Policies and Implementation Actions	Lead	Period	Priority
CL-3.2.1 Review climate impacts to city operations and existing facilities and implement plans and changes to operations, buildings, and practices to reduce risk. Utilize planning methods that identify and prioritize multiple potential adaptation pathways into all planning efforts to mitigate the risk of bad investments and account for changes in climate projections.	WRS, CDD, EXD	**Start:** 2028 **Complete:** Ongoing	
CL-3.2.2 Develop a systematic review process to assess Tumwater's plan to build and maintain roads, buildings, utilities, and other facilities for potential climate vulnerabilities to planned facilities, utilities, and infrastructure projects (e.g., the Capital Facilities Plan) and address prior to installation.	WRS, TED, PRD, CDD, EXD	**Start:** 2028 **Complete:** Ongoing, every 2 years	

C. Greenhouse Gas Reduction Sub-Element Goals

Goal CL-4 **Reduce greenhouse gas emissions from all building types through energy conservation measures prioritizing the deployment of financial resources and programs that help finance or subsidize improvements across Tumwater.**

Policies and Implementation Actions	Lead	Period	Priority
CL-4.1 Reduce energy use across building types.	WRS, CDD	**Start:** 2025 Ongoing	
CL-4.1.1 Provide educational resources and/or technical assistance to industry professionals and building owners and managers on energy-efficient building design, retrofits, and operations for new and existing buildings.	CDD, WRS	**Start:** 2025 Ongoing	

Policies and Implementation Actions		Lead	Period	Priority
CL-4.1.2	Develop data methodology to monitor use and impacts of green building incentives (i.e., encouraging buildings that are environmentally responsible and resource-efficient) and inform recommendations for policy or programs.	CDD, WRS	**Start:** 2027 Ongoing	
CL-4.1.3	Collaborate with Puget Sound Energy to promote and/or deploy energy efficiency programs, local funds, and customer enrollment in clean energy projects and programs.	CDD, WRS	**Start:** 2025 Ongoing	
CL-4.2	**Reduce energy use in existing residential buildings.**	WRS, CDD	**Start:** 2025 Ongoing	
CL-4.2.1	Explore the feasibility of incorporating Home Energy Score disclosures for all types of dwelling units at the time of listing for sale to allow prospective buyers to make informed decisions.	CDD, WRS	**Start:** 2026 Ongoing	
CL-4.2.2	Explore the feasibility of incorporating Home Energy Score disclosures for all types of rental dwelling units at the time of application to allow prospective tenants to make informed decisions.	CDD, WRS	**Start:** 2027 **Complete:** est. 1-5 years	
CL-4.2.3	Explore the feasibility of incorporating policies that require existing dwelling units to undertake an energy audit during a substantial remodel.[8]	CDD, WRS	**Start:** 2029 Ongoing	

[8] "Substantially rehabilitate," or remodel, refers to extensive structural repair or extensive modeling of premises that requires a permit such as a building, electrical, plumbing, or mechanical permit, and that results in the displacement of an existing tenant (RCW 59.18.200).

Policies and Implementation Actions	Lead	Period	Priority
CL-4.2.4 Explore the feasibility of tenant protections and/or landlord incentives to promote energy-efficiency and energy safety in rental housing. These may include rights to request improvements to energy efficiency based on tenant energy burden, protections from eviction, and/or property tax breaks for installing energy conservation measures.	CDD, EXD, FIN, WRS	**Start:** 2025 Complete: est. 1-5 years	
CL-4.2.5 Explore the feasibility of requiring baseline levels of energy efficiency as part of building permit review.	CDD	**Start:** 2029 Ongoing	
CL-4.2.6 Where funding allows, continue programs like Energize Thurston that help reduce emissions of existing residential buildings.	WRS	Ongoing	
CL-4.3 Reduce energy use in existing nonresidential buildings.	WRS, CDD	**Start:** 2025 Ongoing	
CL-4.3.1 Explore feasibility of requiring disclosure of Clean Building Performance Standard EUI (when available) for nonresidential buildings at the time of application for tenants and at time of listing for sales so that owners, tenants, and prospective buyers are informed before making purchasing or rental decisions.	CDD, WRS	**Start:** 2027 **Complete:** est. 1-5 years	
CL-4.3.2 Continue to install LED lighting in City buildings and infrastructure as funding becomes available.	TED, PRFD	Ongoing **Complete:** est. 1-2 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-4.3.3	Create an incentive program for the installation of sustainable roof options like green roofs and cool roofs[9] on nonresidential buildings to reduce energy consumption and the urban heat island effect.	CDD, WRS	**Start:** 2027 Ongoing	
CL-4.3.4	Explore feasibility of expanding the state Department of Commerce's Clean Building Performance Standards energy efficiency performance standards to include existing nonresidential buildings with gross floor areas smaller than 20,000 square feet.	CDD & WRS	**Start:** 2028 Ongoing	
CL-4.3.5	Explore feasibility of expanding the Clean Building Performance Standards program to multifamily buildings smaller than 20,000 square feet. This feasibility study must examine potential negative impacts on landlords.	CDD	**Start:** 2029 **Complete:** est. 1-2 years	
CL-4.4	**Reduce energy use in new construction, redevelopment, and deconstruction.**	WRS, CDD	**Start:** 2025	
CL-4.4.1	Incentivize projects that meet net-zero carbon certification through land use tools such as floor area ratio, density bonus, height bonus, or parking reductions.	CDD	**Start:** 2027 Ongoing	
CL-4.4.2	Support CDD staff pursuing green building accreditations and certifications from green building specialists.	CDD	**Start:** 2025 Ongoing	
CL-4.4.3	Explore developing guidelines for deconstruction and salvaging materials for reuse.	CDD	**Start:** 2026 **Complete:** est. 5 years	

[9] Roofs designed to reflect more sunlight, thus lowering building temperatures.

Policies and Implementation Actions		Lead	Period	Priority
CL-4.5	**Increase energy efficiency in manufactured home parks and RV parks/campgrounds.**	WRS, CDD	**Start:** 2027	
CL-4.5.1	Explore creating an incentive program to weatherize and improve air quality in dwellings not covered in other policies.	CDD	**Start:** 2027 **Complete:** est. 2-3 years	
CL-4.6	**Convert to alternative fuel sources.**	WRS, CDD	**Start:** 2025 Ongoing	
CL-4.6.1	Educate community members on options for electric appliances and the benefits of pairing electrification with the installation of renewable energy. Create incentives to support fuel switching.	WRS	**Start:** 2025 Ongoing	

Goal CL-5 **Expand the use of on-site renewable energy technology (e.g., solar photovoltaics, battery storage, etc.) across all building types through providing funds, code changes, and educational programs.**

Policies and Implementation Actions		Lead	Period	Priority
CL-5.1	**Increase the production and storage of local renewable energy.**	WRS, CDD	**Start:** 2025	
CL-5.1.1	Install solar photovoltaics on all available and feasible municipal sites (including building rooftops, city hall, police and fire stations, community centers, parking lots, and municipal water pump sites) in collaboration with key community partners, like Olympia Community Solar and/or Puget Sound Energy	TED, PRFD	**Start:** 2025 **Complete:** est. 1-5 years	
CL-5.1.2	Expand current solar-ready requirements to include incentives for non-residential building types and for building with a southern roof orientation.	CDD	**Start:** 2025 **Complete:** est. 1-5 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-5.1.3	Pursue public-private partnerships to accelerate clean energy projects.	WRS	**Start:** 2025 **Complete:** ongoing	
CL-5.1.4	Support existing community solar initiatives from Olympia Community Solar and PSE by providing educational resources, promoting programs, and identifying opportunities for Tumwater residents to participate.	WRS	**Start:** 2025 **Complete:** est. 1-5 years	

Goal CL-6 **Reduce greenhouse gas emissions by making it easier for people to use and shift to low-/zero-carbon transportation modes through policy, programming, and regional collaborations.**

Policies and Implementation Actions		Lead	Period	Priority
CL-6.1	**Promote increased use of active forms of travel such as bicycling, walking, and other nonmotorized options.**	TED	**Start:** 2026 Ongoing	
CL-6.1.1	Coordinate with the bike and pedestrian plans of other cities to work toward a large regional plan to expand walking and bicycling infrastructure, per goals laid out in the Transportation Plan to maximize funding mechanisms and opportunities.	TED, WRS	**Start:** 2025 **Complete:** est. 1-5 years	
CL-6.1.2	Prioritize biking, walking, and rolling in coordination with the Transportation Plan by investing in accessible and attractive street-level elements such as seating, shaded sidewalks, ADA ramps, enhanced signals and crossings, and protected bike lanes.	TED, CDD	**Start:** 2025 **Complete:** est. 1-5 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-6.1.3	Explore developing a rebate program for community members who wish to buy a bicycle or electric bicycle, with priority for low-income residents or households with greater barriers to owning vehicles.	WRS	**Start:** 2026 **Complete:** est. 1-5 years	
CL-6.1.4	Continue support for InterCity Transit's Walk N Roll program that focuses on a walking and bicycling incentive program with safety education for families, in coordination with Tumwater School District.	TED, WRS	Ongoing	
CL-6.1.5	Reevaluate long term plans, such as the Transportation Plan and Capital Facilities Plan, and update to prioritize active transportation. Set goals and plans for shifting to active transportation, like developing car-free corridors in commercial and mixed-use areas to encourage mode shift.	TED	**Start:** 2025, **Complete:** est. 3 years	
CL-6.2	**Increase adoption of electric vehicles (EVs).**	WRS	Ongoing	
CL-6.2.1	Collaborate with industry experts and environmental organizations to increase consumer awareness about EV options and incentives for use and purchase.	WRS	**Start:** 2025 **Complete:** est. <1 year	
CL-6.2.2	Explore providing an incentive and/or technical assistance program to support installing EV charging at existing rental housing.	WRS, CDD	**Start:** 2025 **Complete:** est. 1-5 years	
CL-6.2.3	Add free and publicly accessible Level 2 EV charging at as many city properties as feasible.	WRS, TED, PRFD	Ongoing	
CL-6.2.4	Develop public-private partnerships to install two or more Level 3 chargers at commercial centers	EXD, WRS, TED	Ongoing	

Policies and Implementation Actions		Lead	Period	Priority
CL-6.2.5	Advocate for consumer protections for EV owners.	EXD	Ongoing	
CL-6.3	**Facilitate low-carbon options for movement into and through Tumwater.**	CDD, TED	**Start:** 2026 Ongoing	
CL-6.3.1	Collaborate with local businesses and industries to explore low-carbon options for deliveries and the movement of goods into, out of, and through Tumwater.	CDD, TED	**Start:** 2026 Ongoing	
CL-6.3.2	Collaborate with local businesses to identify the people who commute into Tumwater and develop programs to support lower carbon commutes.	CDD, TED	**Start:** 2026 Ongoing	

Goal CL-7 **Reduce vehicle miles traveled by using permitting, regulatory, and other land use tools to promote multimodal transportation options and the use of public transit.**

Policies and Implementation Actions		Lead	Period	Priority
CL-7.1	**Continue land use policies that support increased urban density and efficient transportation networks and reduce urban sprawl.**	CDD	Ongoing	
CL-7.1.1	Create a safe, regionally well-connected, and attractive bike and pedestrian network to encourage active transportation both within Tumwater and between neighboring jurisdictions.	CDD, TED	Ongoing **Complete:** est. 5-10 years	
CL-7.1.2	Adjust zoning code to increase the number of 15-minute neighborhoods (i.e., walkable environment, destinations that support a range of basic living needs	CDD	Ongoing **Complete:** est. 5 years	

Policies and Implementation Actions		Lead	Period	Priority
	and a residential density), in coordination with goals outlined in the Land Use Element.			
CL-7.2	**Increase efficiency of the transportation system.**	TED	Ongoing	
CL-7.2.1	Develop educational campaigns and programs about benefits of properly inflated tires, including signage at gas stations and local businesses and collaborating with schools.	TED, WRS, Stream Team	**Start:** 2025 Complete: est. <1 year	
CL-7.2.2	Work with Intercity Transit to increase local public transit routes or frequency with a focus on providing access to a lower carbon transportation option to the greatest number of riders. Any expansion of service should include an analysis of climate impacts to prevent the program from resulting in an increase in greenhouse gas emissions.	CDD, TED	**Start:** 2025 **Complete:** est. 1-5 years	
CL-7.2.3	Work with Intercity Transit to identify and implement programs that help people move to and from transit, reduce greenhouse gas emissions, and use street-level improvements to connect neighborhoods without the population to support fixed routes transit options. Potential programs explored should include an EV car-share program. Tumwater will engage	CDD, TED	**Start:** 2025 **Complete:** est. 1-5 years	

Policies and Implementation Actions		Lead	Period	Priority
	homeowners' associations for representation and feedback. Expansion of service will include an analysis of climate impacts to prevent the program from resulting in an increase in greenhouse gas emissions.			

Goal CL-8 **Strengthen existing policy and regulations to deploy and enhance natural carbon solutions that are ecosystem-appropriate, store carbon, and offer co-benefits such as pollution reduction, wildlife habitat, and climate resilience.**

Policies and Implementation Actions		Lead	Period	Priority
CL-8.1	**Preserve tree canopy and support habitat restoration and conservation to sequester carbon.**	WRS	Ongoing	
CL-8.1.1	Develop and implement a coordinated reforestation and afforestation program guided by the UFMP with goals and policies to support stormwater management. Consider how existing or future tree canopy can support stormwater management and water quality improvements in receiving waters. Include goals for maintaining or increasing canopy in frontline communities.	WRS	**Start:** 2026 **Complete:** est. 1-5 years	
CL-8.1.2	Develop goals for preserving existing mature tree canopy in alignment with TMC 16.08. Include guidelines and incentives for maintaining larger, more established trees.	WRS	**Start:** 2025 **Complete:** est. >1 year	

Policies and Implementation Actions	Lead	Period	Priority
CL-8.1.3 Support implementation of habitat conservation plans (HCPs) that allow for state required development and provide for preservation and restoration of prairie habitat for endangered and threatened prairie species.	CDD	Ongoing	
CL-8.1.4 Continue to champion statewide conservation efforts to protect, restore, and manage wetlands and land and habitats that are near rivers and streams and provide watershed management and flood protection (i.e., riparian ecosystems).	CDD	Ongoing	
CL-8.1.5 Build relationships and capacity among regional partners to foster successful and effective data coordination and program alignment.	WRS	Ongoing	
CL-8.1.6 Maximize tree canopy coverage in surface parking lots. Develop an initiative for identifying impervious surfaces across parking lots for potential reforestation or conversion (i.e., de-pave) while not preventing the installation of artificial shade covers intended to support solar arrays.	WRS, CDD	**Start:** 2027 **Complete:** est. 1-5 years	

D. Resilience Sub-Element Goals

Goal CL-9 **Design, plan, and upgrade buildings and energy infrastructure to accommodate renewable energy opportunities, keep the community safe, and withstand and recover from extreme weather and natural hazards worsened by climate change.**

Policies and Implementation Actions		Lead	Period	Priority
CL-9.1	**Require that planned facilities, utilities, and infrastructure projects and existing vulnerable sites be built or hardened to avoid or withstand climate impacts, including extreme heat, extreme precipitation, and sea level rise.**	CDD, WRS	**Start:** 2028	
CL-9.1.1	Identify potential funding sources to bury existing power lines and associated infrastructure, or to make them more resilient to climate impacts where burial is not feasible.	CDD, TED, WRS	Ongoing	
CL-9.1.2	Implement a phased program to improve the resilience and safety of existing power lines, prioritizing areas identified as higher fire risk in the Vulnerability Assessment.	CDD, TED, WRS	**Start:** 2028 Ongoing as funding becomes available	
CL-9.1.3	Identify potential funding sources to develop and maintain a grant program that will enable affordable housing development projects to bury new power lines and associated infrastructure as required, or to make more resilient to climate impacts where burial is not feasible.	WRS, CDD	**Start:** 2028 **Complete:** Ongoing	
CL-9.2	**Plan energy infrastructure to be able to integrate with an increase in renewable energy sources, including increasing energy storage capacity to improve energy grid resilience.**	CDD, WRS, Fire and EMS	**Start:** 2026	
CL-9.2.1	Identify public sites to install local microgrid solar and battery storage facilities that will lead to negligible or low impacts on local habitats, infrastructure, and human health.	TED, PRFD, WRS, CDD	**Start:** 2027 **Complete:** est. 2-3 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-9.2.2	Install locally distributed renewable energy generation and battery storage infrastructure at identified key public facilities to enable continuity of operations for a minimum of 24 hours.	TED, PRFD, WRS, CDD	**Start:** 2030 **Complete:** est. 5-10 years	
CL-9.3	**Require buildings in high-risk areas[10] to be designed and built to be resilient to natural hazards and extreme weather worsened by climate change.**	CDD, WRS	**Start:** 2028	
CL-9.3.1	Develop and enforce fire-resilience standards for new and redeveloped sites in high-risk wildfire areas identified by the State of Washington's Wildland-Urban Interface Map.	CDD	**Start:** 2028 **Complete:** est. 4-5 years	 Period contingent on release of revised WUI map.
CL-9.3.2	Require a hazard assessment and climate risk planning for new and existing buildings in designated high-risk areas, designing for enhanced resilience and mandating building practices that protect inhabitants from climate impacts.	CDD, WRS	**Start:** 2028 Ongoing	
CL-9.3.3	Help facilitate the subsidization of the cost of hazard risk assessments and climate risk planning for low-income property owners and low-income housing development projects.	CDD, WRS, FIN	**Start:** 2028 Ongoing	
CL-9.4	**Encourage property owners to increase the resilience of existing buildings to natural hazards and extreme weather worsened by climate change.**	CDD, WRS	**Start:** 2028	

[10] High risk areas to be identified by Tumwater's Comprehensive Vulnerability Assessment, which should be completed by 2028. Weatherization and hardening building codes should be developed based on identified risks and land use designations of at-risk land parcels.

Policies and Implementation Actions		Lead	Period	Priority
CL-9.4.1	Develop Climate Resilience Guidelines demonstrating how to design buildings for passive survivability,[11] at a minimum providing one common room for residents that provides refuge from heat and power during extended outages for medical necessities. Share this guidance with developers and property owners through outreach activities.	CDD, WRS	**Start:** 2031 **Complete:** est. 5 years	
CL-9.4.2	Explore creation of an incentive program for retrofit of existing buildings to meet established Climate Resilience Standards.	CDD, WRS	**Start:** 2033 Ongoing	
CL-9.4.3	Develop and maintain a rebate program for low-income residents who do not qualify for weatherization assistance through the Community Action Council or whose dwellings are considered vulnerable, such as manufactured homes, to weatherize their homes against extreme weather.	WRS	**Start:** 2028 **Complete:** Ongoing	
CL-9.5	**Work with Puget Sound Energy to improve the safety and reliability of infrastructure vulnerable to climate change.**	WRS, CDD	**Start:** 2026	
CL-9.5.1	Collaborate with local energy utilities to explore large-scale energy storage options to use in Tumwater as part of a transition to reliable renewable energy.	WRS, Puget Sound Energy, CDD, Fire and EMS	**Start:** 2026 **Complete:** est. 3 years	

Goal CL-10 Increase preparedness for acute climate impacts and improve the resilience of Tumwater's people and systems against climate hazards.

[11] See Part 2: Technical Information for more information on heat projections, passive survivability, and building code.

Policies and Implementation Actions		Lead	Period	Priority
CL-10.1	**Improve community outreach on and response capabilities for climate health and hazard issues, prioritizing frontline communities to address economic, social, and health disparities.**	WRS & EXD	**Start:** 2025	
CL-10.1.1	Collaborate with a CBO to build a volunteer network to develop and manage a vulnerable population database that includes community members who require aid and/or check-in calls during and after emergencies. This database can be built on the existing Lifeline Program members.	WRS, Fire and EMS	**Start:** 2025 **Complete:** est. 1 year	
CL-10.1.2	Transition management of the vulnerable population database to Tumwater and develop a long-term strategy to keep the database up to date and oversee its use during emergencies.	WRS, Fire and EMS	**Start:** 2028 **Complete:** est. 1-2 years	
CL-10.1.3	Explore developing a Pre-Event Recovery Ordinance using American Planning Association's guidance that will allow Tumwater to facilitate a Local Recovery Management Organization charged with planning for long-term, resilient disaster recovery and coordinating with the Tumwater Disaster Recovery Group and County Disaster Recovery Team after a disaster to align long-term planning with short-term needs.	CDD, EXD, City Attorney, Fire and EMS	**Start:** 2026 **Complete:** < 1 year	

Policies and Implementation Actions	Lead	Period	Priority
CL-10.1.4 Explore developing climate-resilient redevelopment guidelines to help guide disaster recovery decisions. Utilize recommendations from FEMA's Pre-Disaster Recovery Planning Guide for Local Governments and the hazard-specific zoning overlays created by CL-13.4.3.	CDD, EXD, Fire and EMS	**Start:** 2031 **Complete:** est. 1-5 years	
CL-10.1.5 Require that all City employees that participate would serve a role in EOC activation complete FEMA training courses on disaster recovery and achieve functional expertise in FEMA post-disaster processes.	City	Ongoing	
CL-10.1.6 Explore developing a neighborhood-scale capacity grant or other assistance program to support neighborhood scale resiliency, disaster preparedness, and/or resource hubs.	WRS, CDD, EXD	**Start:** 2026 Ongoing	
CL-10.2 Develop resources to mitigate the risks posed by extreme heat.	WRS, Fire and EMS	**Start:** 2026	
CL-10.2.1 Implement the Thurston County Extreme Heat, Emergency Response, and Illness Prevention Plan.	WRS, Fire and EMS	**Start:** 2026	
CL-10.2.2 Preserve and expand tree and shade cover to reach the 2040 goal of 40% recommended in the UFMP to reduce urban heat.	WRS	**Start:** 2027 **Complete:** est. 10-15 years	
CL-10.2.3 Support the work of CBOs and regional agencies creating and implementing resilience hubs.	WRS, Fire and EMS,	**Start:** 2026 **Complete:** est. 3-5 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-10.2.4	Explore feasibility of implementing and maintaining a program to distribute portable cooling units and install heat pumps, prioritizing households with residents most vulnerable to extreme temperature events such as renters and low-income seniors.	WRS	**Start:** 2026 **Complete:** est. 1-2 years	
CL-10.3	**Increase regional wildfire resilience, preparedness, and response capabilities in Tumwater.**	WRS, Fire and EMS	**Start:** 2030	
CL-10.3.1	Collaborate with regional partners to develop a community wildfire protection plan.	WRS, Fire and EMS	**Start:** 2030 **Complete:** est. 3-5 years	
CL-10.3.2	Collaborate with emergency managers and fire experts to educate and empower homeowners to make changes to their homes and properties that lower their wildfire risk, encouraging measures that do not decrease canopy cover where possible.	WRS, Fire and EMS	**Start:** 2030 **Complete:** est. 5-7 years	
CL-10.3.4	Help facilitate grant funding for low-income community members to follow recommended changes to their homes and properties to lower their wildfire risk.	CDD, Fire and EMS	**Start:** 2030 **Complete:** est. 2 years	
CL-10.4	**Collaborate with regional partners to develop resources that address projected increases in risks and impacts associated with climate change.**	WRS, Fire and EMS	**Start:** 2026	
CL-10.4.1	Develop and share guidance for navigating post-disaster mental health and social resources, translated into multiple languages.	WRS, Fire and EMS, EXD	**Start:** 2026 **Complete:** < 2 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-10.4.2	Develop and implement a regional wildfire and smoke resilience and response strategy.	WRS, Fire and EMS, ORCAA	**Start:** 2027 **Complete:** est. 5-7 years	
CL-10.4.3	Work with the County to develop a protocol for using the County emergency alert system to issue Tumwater-specific alerts for wildfire risk, smoke exposure, and evacuation information. Create alert messaging that uses plain language to communicate risks and information.	WRS, Fire and EMS	**Start:** 2027 **Complete:** est. 3-5 years	
CL-10.5	**Improve community resilience, health equity, and environmental justice by striving to ensure that all community members can walk or roll to public green spaces within ½ a mile and connected by sidewalks or protected walkways.**	TED, WRS, PRFD	**Start:** 2026	
CL-10.5.1	Utilize data from the Trust for Public Land and from community outreach efforts to find any gaps in equitable access to public green spaces.	WRS	**Start:** 2026 **Complete:** est. 1-2 years	
CL-10.5.2	Engage community members who lack equitable access to green spaces to determine how they would like to improve their access. Options can include better transportation options, addition of new green space, and improved safety of active transportation routes, among others.	TED, WRS, PRFD	**Start:** 2027 **Complete:** est. 1-5 years	
CL-10.5.3	Finish the Deschutes Valley Trail project, aiming to complete construction by 2040.	TED, WRS, PRFD	**Start:** 2028 **Complete:** est. 10 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-10.6	**Position Tumwater to qualify for more funding opportunities to adapt to climate impacts.**	WRS	**Start:** 2028	
CL-10.6.1	Work with academic research institutions to study hazard events of all magnitudes to provide a fuller understanding of the Tumwater's hazard characteristics — including those affected by climate change.	WRS	**Start:** 2028 **Complete:** est. 1-3 years	
CL-10.6.2	Analyze how well the municipal water system would maintain adequate pressure during a major wildfire event with multiple structures burning and how it will look under current and projected drought conditions. Generate a report with specific recommendations for increasing the resilience of the water system.	WRS	**Start:** 2028 **Complete:** est. 2-3 years	
CL-10.6.3	Incorporate findings from Tumwater's Comprehensive Vulnerability Assessment into the Tumwater Annex of the Thurston County Hazard Mitigation Plan. Identify specific projects and opportunities that Tumwater can leverage to maximize funding.	CDD	**Start:** 2029 **Complete:** est. 2-3 years	
CL-10.6.4	Develop a specific, phased plan for completing a large-scale tree planting program.	WRS	**Start:** 2027 **Complete:** est. 3-4 years	
CL-10.7	**Work with the Thurston County Public Health Department to increase local understanding of how climate change impacts vector-borne disease outbreaks. Make a plan to protect against projected increases in frequency and severity.**	WRS	**Start:** 2027	

Policies and Implementation Actions		Lead	Period	Priority
CL-10.7.1	Work with the Thurston County Public Health Department to identify and map areas in Tumwater that are at high risk to become disease vectors, including developed areas with poor drainage and standing water that serves no ecological purpose.	WRS, TED	**Start:** 2027 **Complete:** est. 2 years	
CL-10.7.2	Coordinate with the Thurston County Health Department to develop strategies to mitigate projected increases in disease and pest risk.	WRS, CDD	**Start:** 2029 **Complete:** est. 3 years	
CL-10.8	**Develop programs that enable and empower community members to protect themselves from poor air quality.**	WRS, Fire and EMS	**Start:** 2027	
CL-10.8.1	Collect data to determine how many Tumwater community members are vulnerable to poor air quality and the neighborhoods in which these residents live, using both quantitative and qualitative data and from community outreach efforts. Use collected data to set target thresholds for shelter occupancy and locations and air conditioner/heat pump and air filtration distribution programs.	WRS	**Start:** 2027 **Complete:** est. 1-2 years	
CL-10.8.2	Develop a program to distribute personal protective equipment to populations vulnerable to poor air quality.	WRS, Thurston County Health Department, & Community Based Organizations	**Start:** 2029 **Complete:** est. 1-2 years **Maintain:** ongoing	

Policies and Implementation Actions	Lead	Period	Priority
CL-10.8.3 Identify facilities that serve high-risk populations to create incentive programs encouraging infrastructure updates for clean indoor air. Updates should include HVAC system improvements.	WRS, Fire and EMS, EXD	**Start:** 2030 **Complete:** est. 1-5 years	
CL-10.8.4 Enhance and protect the quality of life for non-human residents during poor air quality events. Activities can include educational outreach, protection of wildlife corridors, and the development of emergency prevention and response plans focused on preventing harm to non-human residents.	WRS, Fire and EMS, EXD	**Start:** 2028 Ongoing	
CL-10.9 Work with Thurston County Emergency Management to improve access to the resources needed for community members to shelter in place or to adequately reach temporary shelter.	Fire and EMS, WRS	**Start:** 2025	
CL-10.9.1 Coordinate with other agencies and jurisdictions to provide more cooling shelters with 24-hour capacity. Offer 24-hour capacity for all of Tumwater's heat-vulnerable residents including seniors, low-income, and houseless individuals. Shelter locations should be sited equitably throughout Tumwater, with priority for opening locations near the highest concentrations of heat-vulnerable residents.	WRS, Fire and EMS	**Start:** 2025 **Complete:** est. 5-10 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-10.9.2 Coordinate with local businesses, community centers, and other neighborhood hubs to assess the potential of using these spaces as cooling centers. Provide sites that agree to participate in this program with resources detailing how to set up an equitable and functional cooling center.	WRS, Fire and EMS	**Start:** 2025 **Complete:** est. 5-10 years	
CL-10.9.3 Develop outreach programs or materials to increase awareness and education on individual emergency preparedness (e.g., Two Weeks Ready).	Fire and EMS, EXD, WRS	**Start:** 2025 **Complete:** est. <1 year	
CL-10.10 Increase language accessibility of emergency services, plans, and resources.	EXD	**Start:** 2025	
CL-10.10.1 Translate all emergency resources and plans into languages spoken in Tumwater.	EXD	**Start:** 2025 Ongoing upon adoption of relevant plans	

Goal CL-11 Preserve, protect, and sustain cultural sites and resources in alignment with the values and needs of Tribes, traditional stewards, and frontline communities.

Policies and Implementation Actions	Lead	Period	Priority
CL-11.1 Enhance partnership between the Tribes and Tumwater, integrating Tribal expertise, opinions, and values into climate planning efforts, projects, and programs.	EXD, WRS,	**Start:** 2025	

Policies and Implementation Actions		Lead	Period	Priority
CL-11.1.1	In collaboration with the Tribes, develop guidelines and standards for incorporating Traditional Ecological Knowledge into City programs and planning efforts to adapt to climate change impacts.	WRS	**Start:** 2025 **Complete:** est. 5 years	
CL-11.1.2	Integrate the Tribal Stewards Curriculum or an alternative approved by Tribal representatives into regular City training schedules.	WRS	**Start:** 2030 **Complete:** est. 5 years	
CL-11.2	**In accordance with Tribal treaty rights, protect, enhance, and restore ecosystems and culturally important consumptive and non-consumptive resources including foods, medicinal plants, places, and materials that could be adversely impacted by climate change.**	WRS	**Start:** 2025	
CL-11.2.1	Work with local partners, especially representatives of the Tribes, to facilitate a native plant nursery and seed bank to support long-term ecological restoration and foster continued access to culturally significant plants.	WRS	**Start:** 2026 **Complete:** est. 4 years	
CL-11.2.2	In collaboration with the Tribes, identify consumptive and non-consumptive resources that will be adversely impacted by climate change.	WRS	**Start:** 2025 **Complete:** est. 3 years	
CL-11.2.3	In collaboration with the Tribes, develop and implement a plan to protect, enhance, restore, and/or preserve cultural resources that have been identified as threatened by climate change.	WRS	**Start:** 2028 **Complete:** est. 5 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-11.2.4 Collaborate with tribes to provide access to foraging opportunities including but not limited to camas, evergreen huckleberry, bog plant species, and cedar.	WRS	**Start:** 2025 Ongoing	
CL-11.3 Collaborate with the Tribes to prioritize the preservation of archaeological sites and traditional cultural properties that are vulnerable to climate impacts.	WRS, CDD, PRFD	**Start:** 2026	
CL-11.3.1 Request recommendations from the Tribes for actions Tumwater can take to preserve historic sites and cultural properties.	WRS, PRFD	**Start:** 2026 **Complete:** est. 3 years	
CL-11.3.2 In collaboration with the Tribes, develop guidelines for protecting, enhancing, and restoring affected historic sites and cultural properties.	WRS	**Start:** 2029 **Complete:** est. 5 years	

Goal CL-12 With climate, growth, and environmental changes in mind, identify and elevate the protection of key habitats, ecosystem services, and wildlife corridors.

Policies and Implementation Actions	Lead	Period	Priority
CL-12.1 Manage Tumwater's urban forest in line with the most recent UFMP and current climate projections and guidance.	WRS	**Start:** 2025	
CL-12.1.1 Update the Tree Ordinance (TMC 16.08).	City	**Start:** 2025 **Complete:** < 1 year	
CL-12.1.2 Protect and enhance the climate resilience of urban forests by implementing the most recent UFMP. Prioritize implementation of UFMP actions that provide benefits for frontline communities.	WRS	Ongoing	

Policies and Implementation Actions		Lead	Period	Priority
CL-12.1.3	Update the UFMP every five years, including updated tree species selection and planting guidance, and integrate the most recent available climate data into each new edition of the Plan. Climate guidance consideration should include projections for heat, precipitation, pests, and any other relevant emergent information.	WRS	**Start:** 2027 Reassess every 5 years	
CL-12.1.4	Develop and share guidance with community members that identifies native drought- and pest-resistant trees, shrubs, and grasses. Encourage their use over non-native, non-resilient species in urban forest plantings and in restoration efforts to support climate resilience.	WRS	**Start:** 2027 **Complete:** est. 2 years	
CL-12.1.5	Develop a program to analyze and address the climate impacts and risks of pests and disease on Tumwater's urban forest.	WRS	Ongoing	
CL-12.1.6	Assess tree canopy and forests including parks, greenbelts, and urban forests to identify potential wildfire risk zones and develop strategies to mitigate that risk.	WRS, PRFD	**Start:** 2038 **Complete:** est. 8 years	
CL-12.2	**Protect, restore, and connect streams, estuaries, wetlands, floodplains, and other land and habitats that are next to rivers and streams (i.e., riparian ecosystems) to increase resiliency to climate change and reduce flood risk.**	WRS, CDD	**Start:** 2026	
CL-12.2.1	Conduct inventory of watersheds throughout Tumwater, including an assessment of overall health and connectivity and the type and degree of restoration or protection needed.	WRS	**Start:** 2026 **Complete:** est. 3 years	

Policies and Implementation Actions		Lead	Period	Priority
CL-12.2.2	Protect and restore wetlands and corridors between wetlands to provide biological and hydrological connectivity that fosters resilience to climate impacts.	WRS, CDD	**Start:** 2029 **Complete:** est. 8 years	
CL-12.2.3	Protect and restore vegetation in habitats that are next to streams and rivers to reduce erosion, provide shade, and support other functions that improve the climate resilience of streams.	WRS, CDD	**Start:** 2029 **Complete:** est. 8 years	
CL-12.2.4	Collaborate with relevant parties to prioritize where and how beavers can be incorporated strategically to address climate change impacts on water quality, streamflow volume, and habitats surrounding rivers and streams without causing any adverse impacts to Oregon spotted frog habitat.	WRS	Ongoing	
CL-12.3	**Manage Tumwater's natural resources to protect, restore, and connect native ecosystems and foster habitats that are resilient to climate change.**	CDD, WRS	**Start:** 2030	
CL-12.3.1	Collaborate with other regional partners to inventory potential climate refugia sites in Tumwater that will require protection and to assess existing habitat protections, habitat quality levels, and connectivity.	WRS, Tribes, County, TRPC, Climate Refugia Coalition	**Start:** 2032 **Complete:** est. 5 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-12.3.2 Develop an Ecosystem Restoration Plan or a Natural Resource Management Plan that incorporates relevant measures from other relevant existing plans. The plan(s) must address existing stressors, consider climate change impacts, emphasize taking a precautionary approach to reduce risk of environmental harm, and guide adaptive management.	WRS	**Start:** 2030 **Complete:** est. 5 years	
CL-12.3.3 Implement the Ecosystem Restoration Plan and/or Natural Resource Management Plan.	WRS, CDD	**Start:** 2035 **Complete:** est. 2 years	
CL-12.4 Increase the climate resilience of native fish species and aquatic ecosystems by reducing the impact of threats such as aquatic invasive species, invasive plants, pollutants, and changes in seasonal water flow.	WRS	**Start:** 2025	
CL-12.4.1 Conduct a study of existing threats to native fish and aquatic ecosystems to prioritize which threats are addressed.	WRS, TRPC	**Start:** 2025 Ongoing	
CL-12.4.2 Develop an Aquatic Resilience Strategy that addresses each unique threat identified.	WRS	**Start:** 2027 **Complete:** est. 1 year	
CL-12.4.3 Implement the Aquatic Resilience Strategy.	WRS	**Start:** 2028 **Complete:** est. 5 years	
CL-12.5 Advocate for prioritizing maintenance of habitat integrity and function when working with regulatory agencies to determine allowed activities and uses within protected wetlands and Fish and Wildlife Habitat Conservation Areas (FWHCAs).	WRS	**Start:** 2025	
CL-12.5.1 Identify programs that will have a substantive impact on fish and wildlife habitat.	WRS	**Start:** 2025 Ongoing	

Policies and Implementation Actions	Lead	Period	Priority
CL-12.5.2 Review and amend local policies, rules, and management activities to eliminate potential negative impacts on fish and wildlife habitat and take advantage of opportunities to incorporate positive impacts.	WRS, TED, PRFD, CDD	**Start:** 2028 Ongoing	
CL-12.6 Take early action to eliminate or control non-native invasive species, including insects and plants that take advantage of climate change, especially where invasives threaten native species or ecosystem function.	WRS, PRFD, TED	**Start:** 2026	
CL-12.6.1 Develop and implement a monitoring plan to assess how invasive species are spreading and impacting local plant communities.	WRS	**Start:** 2026 **Complete:** est. 2 years	
CL-12.6.2 Collaborate with regional stakeholders and experts to develop an Invasive Insect and Pest Management Plan based on collected data. Utilize an integrated approach that includes a wide variety of strategies, including at a minimum: (a) management of established pest infestations, (b) widespread use of and restoration of native plants resilient to regional pest threats; (c) regular monitoring activities, and (d) requirements to include invasive species prevention plans in future projects.	WRS	**Start:** 2028 **Complete:** est. 5 years	

CL-13 Promote zoning and development decisions that support compact urban development and city-wide resilience, including a resilient local economy.

Policies and Implementation Actions	Lead	Period	Priority
CL-13.1 Form a working group to secure Tumwater's economic resilience regarding climate impacts.	EXD, WRS	**Start:** 2025	
CL-13.1.1 Develop partnerships within the local business community and in collaboration with existing economic organizations and other stakeholders to set up a working group to analyze climate-driven projected economic impacts on Tumwater.	EXD, WRS	**Start:** 2027 **Complete:** est. 2 years	
CL-13.1.2 Provide resources to the local Economic Climate Resilience Working Group to inform the development of a climate resilience component of the Economic Development Plan.	EXD, WRS	**Start:** 2029 **Complete:** est. 1-2 years	
CL-13.1.3 Coordinate with partners to incorporate continuity of operations thinking into the County's Comprehensive Emergency Management Plan.	EXD, WRS	**Start:** 2029 **Complete:** est. 4 years	
CL-13.1.4 Form partnerships with workforce development organizations to provide services and resources to Tumwater community members that support workers and local businesses affected by climate change.	EXD, WRS	**Start:** 2025 **Complete:** est. 7 years	
CL-13.2 Restore and maintain critical areas, non-regulated open space areas, and the floodplain to maximize climate resilience and ecosystem benefits.	WRS	**Start:** 2026	
CL-13.2.1 Inventory existing and projected vulnerabilities of critical areas, open spaces, and floodplain-adjacent parcels.	WRS	**Start:** 2026 **Complete:** est. 2 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-13.2.2 Identify maintenance and restoration actions needed to keep critical areas and open spaces resilient. Prepare a report outlining the recommended actions which should incorporate green and gray-green infrastructure that will enhance natural systems into recommended actions.	WRS, TED	**Start:** 2028 **Complete:** 3 years	
CL-13.2.3 When new State best available science is issued, update critical areas ordinances.	CDD	Ongoing	
CL-13.2.4 Coordinate with FEMA to update floodplain and flood risk maps for the region based on projected extreme precipitation, increased winter streamflow, and sea-level rise due to climate change.	CDD	**Start:** 2026 **Complete:** est. 6 years	
CL-13.2.5 Review best available science for buffers and setbacks for steep slopes vulnerable to erosion exacerbated by climate change, and explore setting new minimums, if necessary, so that improvements are not required to protect structures during their expected life.	CDD	**Start:** 2028 Reassess every 2 years	
CL-13.3 Identify and implement strategies for reducing residential development pressure in the wildland-urban interface.	CDD	**Start:** 2027	
CL-13.3.1 Identify areas with high fire risk and explore the feasibility of land use changes to reduce further development in these areas.	CDD	**Start:** 2032 **Complete:** est. 1-3 years	
CL-13.3.2 Develop incentives and regulations to maintain open space buffers to reduce wildfire risk.	WRS, CDD	**Start:** 2027 **Complete:** est. 3-5 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-13.4 Encourage the location of new development in areas where exposure to climate hazards is low and ecological impacts are minimized.	CDD	**Start:** 2025	
CL-13.4.1 Develop design guidelines for climate-resilient multi-use development. Guidelines should require residential development to be designed for passive survivability under future climate projections.	CDD	**Start:** 2030 **Complete:** est. 5 years	
CL-13.4.2 Update the regional Transfer of Development Rights program to meet state-mandated growth requirements while preventing urban sprawl and protecting key ecosystems.	CDD	**Start:** 2028 **Complete:** est. 1-2 years	
CL-13.4.3 Develop hazard-specific overlay zones to inform the development of Climate Resilience Guidelines (CL 9.4.1) and climate-resilient redevelopment guidelines (CL 10.1.4) to promote climate resilient development.	WRS, CDD, TED	**Start:** 2028 **Complete:** est. 3 years	
CL-13.4.4 Update development regulations on a regular basis to incorporate best practices for reducing the risk of wildfire, extreme heat, flooding, and other climate-exacerbated hazards.	CDD	**Start:** 2025 Reassess every 5 years	
CL-13.5 Support efforts of local businesses to bolster climate preparedness and continuity of operations.	EXD, WRS	**Start:** 2035	
CL-13.5.1 Collaborate with key stakeholders to draft recommendations for new building codes and incentive programs that help installation of on-site renewable energy and battery storage.	EXD,	**Start:** 2035 **Complete:** est. 3 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-13.6 In areas with significant vulnerability to climate hazards, facilitate and support long-term community visioning including consideration of managed retreat.	CDD, WRS	**Start:** 2026	
CL-13.6.1 Utilize information from the Comprehensive Vulnerability Assessment to identify areas at high risk from climate impacts that will require substantial adaptation activities or the managed retreat of the entire community.	CDD, WRS	**Start:** 2028 **Complete:** est. 7 years	
CL-13.6.2 Conduct regular outreach activities with identified high-risk communities and other key stakeholders (Transportation, developers, etc.) to educate them on risks.	CDD, WRS	**Start:** 2029 Ongoing	
CL-13.6.3 Review adaptation plans for communities in other cities and neighborhoods facing similar risks.	CDD, WRS	**Start:** 2026 **Complete:** est. 1 year	
CL-13.6.4 Develop long term action plans with at-risk communities, with distinct phases for different increasing levels of risk.	CDD, WRS	**Start:** 2028 **Complete:** est. 3-5 years	

Goal CL-14 Strive to create a local transportation system, including infrastructure, routes, and active travel modes, which fosters connectivity and can withstand and recover quickly from climate impacts.

Policies and Implementation Actions	Lead	Period	Priority
CL-14.1 Improve street connectivity, transit accessibility, and walkability, including sidewalks and street crossings, to ease emergency evacuation.	TED	**Start:** 2028	
CL-14.1.1 Assess Tumwater's street network to find gaps in street connectivity and transit access.	TED	**Start:** 2028 **Complete:** est. 5 years	

Policies and Implementation Actions	Lead	Period	Priority
CL-14.1.2 Redesign streets in alignment with complete streets mandate where possible, eliminating connectivity gaps to facilitate smoother evacuations and create whole communities connected by safe walking routes.	TED	**Start:** 2035 **Complete:** est. >10 years	
CL-14.1.3 Work with Intercity Transit to expand their transit program that provides evacuation aid to community members who do not or cannot drive, utilizing the vulnerable population database (CL-10.1.2).	Fire and EMS	**Start:** 2029 **Complete:** est. 8 years	
CL-14.1.4 Assess current transportation network and transit options to identify barriers to accessibility and develop a plan to address gaps for all abilities and accessibility supports.	TED	**Start:** 2026 **Complete:** est. 3-5 years	
CL-14.2 Prioritize access to and restoration of water bodies and water-adjacent sites when designing and siting new and expanded transportation infrastructure.	TED, WRS	Ongoing	
CL-14.3 Improve habitat connectivity wherever possible when constructing and redeveloping roadways.	TED, WRS	**Start:** 2028	
CL-14.3.1 Integrate habitat connectivity considerations into road construction and redevelopment projects, reviewing plans for opportunities to make roads more permeable for both aquatic and terrestrial species through actions like widening culverts.	TED, WRS	**Start:** 2028 Ongoing	
CL-14.4 Facilitate quick recovery of the whole multimodal transportation system after disruption from disasters or extreme weather events.	TED	**Start:** 2028	

Policies and Implementation Actions		Lead	Period	Priority
CL-14.4.1	Develop transportation recovery plans that assess how recovery of one aspect of the transportation system could inhibit recovery of other forms of transportation and strive to avoid such impacts. For example, snow plowing should not restrict access to bike lanes.	TED	**Start:** 2028 **Complete:** est. 5 years	
CL-14.4.2	Prioritize infrastructure needed for the recovery of Intercity Transit in the aftermath of an extreme weather event.	TED	Ongoing	

Goal CL-15 Protect and improve water quality and availability.

Policies and Implementation Actions		Lead	Period	Priority
CL-15.1	**Manage Tumwater's water sustainably, ensuring there is adequate quantity and quality of water available for future generations.**	WRS	Ongoing	
CL-15.1.1	Develop guidance for Tumwater residents, businesses, and developers on sustainable water management practices. Topics may include smart irrigation, drought tolerant plant selection, etc.	WRS	**Start:** 2025 **Complete:** est. 1-2 years	
CL-15.1.2	Study projected climate hazard impacts on water quality & quantity and develop strategies to protect and preserve water for Tumwater's future.	WRS	Ongoing (as new projections are available)	

Policies and Implementation Actions		Lead	Period	Priority
CL-15.1.3	Evaluate the long-term adequacy of water delivery infrastructure to effectively anticipate and manage changes in hydrological patterns. Changes in hydrological patterns may include increases in flooding frequency or reduction of late-summer water availability associated with climate change.	WRS	**Start:** 2028 **Complete:** est. 3-4 years	
CL-15.1.4	Assess current groundwater reservoirs aquifers for any projected climate impacts, including saltwater intrusion, contamination, and reduced quantities (diminishment of aquifers and reduction of streamflow). If necessary, develop and implement strategies to mitigate impacts.	WRS	**Start:** 2028 **Complete:** est. 4-5 years	
CL-15.2	**Improve Tumwater's drought resilience through water reclamation and conservation measures, drought-tolerant landscape design, and advocacy.**	WRS, CDD	**Start:** 2025	
CL-15.2.1	Expand use of reclaimed water at City facilities when resources are available and expand municipal reclaimed water systems.	WRS	**Start:** 2026 Reassess every 2 years	
CL-15.2.2	Promote rain gardens, dormant lawns, and lawn alternatives, as well as native and drought-tolerant landscaping choices. Facilitate an incentive or rebate program for community members who use native and drought-tolerant landscaping options.	WRS	**Start:** 2025 Ongoing	
CL-15.2.3	Facilitate a demonstration area for lawn alternatives that highlights native and drought-tolerant landscaping.	WRS, PRFD	**Start:** 2026 **Complete:** est. 1 year	

Policies and Implementation Actions		Lead	Period	Priority
CL-15.2.4	Advocate at the county health department and state level agencies for the reuse of greywater on-site in buildings for flushing toilets and irrigation.	WRS	**Start:** 2025 Ongoing	
CL-15.2.5	Advocate at state level to prioritize using water resources in alignment with public interests.	WRS	**Start:** 2025 Ongoing	
CL-15.3	**Develop and implement a comprehensive drought resilience strategy that factors in projected climate impacts and sets action levels for different drought stages.**	WRS	**Start:** 2026	
CL-15.3.1	Conduct outreach to understand current water resource needs (i.e., water-reliant livelihoods).	WRS	**Start:** 2026 **Complete:** est. 1 year	
CL-15.3.2	Draft measures to protect access to water availability at a fair rate for low-income residents and residents whose income relies on water.	WRS	**Start:** 2027 **Complete:** est. 2 years	
CL-15.4	**Increase use of Low-Impact Development infrastructure projects that help capture, filter, store, and reuse stormwater runoff.**	WRS	**Start:** 2025	
CL-15.4.1	Continue to prioritize low impact development infrastructure projects using Stormwater Utility Funds.	WRS	Ongoing	
CL-15.4.2	For all stormwater project designs, require use of improved stormwater runoff modeling that uses future rainfall projections.	WRS	Ongoing	
CL-15.4.3	Share guidance for different types of low impact development best management practices with developers to use in future projects.	WRS	**Start:** 2025 Ongoing	

Policies and Implementation Actions	Lead	Period	Priority
CL-15.5 In coordination with the Land Use and Lands for Public Purposes Element, assess current and projected future water demand and water storage.	WRS	Ongoing	

Goal CL-16 Expand local food justice to address climate impacts and increase access to nourishing, affordable, culturally appropriate, and climate-friendly foods while expanding local use of composting.

Policies and Implementation Actions	Lead	Period	Priority
CL-16.1 Improve local food justice through collaboration, education, and advocacy.	WRS	**Start:** 2025	
CL-16.1.1 Implement the Food System Plan, updating it periodically as necessary.	CDD, WRS	**Start:** 2026 **Complete:** est. 1-2 years	
CL-16.1.2 Identify relevant stakeholders who can further sustainable, climate-adapted, and equitable food distribution in Tumwater.	CDD, WRS	**Start:** 2025 **Complete:** est. 1 year	
CL-16.1.3 Explore opportunities for the community to provide and engage in local and sustainable food production and consumption, such as farmers markets and community gardens.	WRS	**Start:** 2025 **Complete:** est. 2-5 years	
CL-16.1.4 Work with urban farms and community gardens to invest in climate-resilient water storage solutions such as natural rainwater collection.	WRS	**Start:** 2027 **Complete:** est. 3 years	
CL-16.1.5 Advocate for state-wide regulations that protect producers and consumers from climate change impacts on the food system.	WRS	Ongoing	

Policies and Implementation Actions	Lead	Period	Priority
CL-16.1.6 Collaborate with community members to identify culturally important foods and develop strategies to secure access to these, incorporating strategies into an update to the Food System Plan.	WRS	**Start:** 2030 **Complete:** est. 2-3 years	
CL-16.2 Increase composting in urban agriculture and by private residences.	WRS	**Start:** 2026	
CL-16.2.1 Develop outreach materials to promote and educate on composting methods and systems.	WRS	**Start:** 2026 **Complete:** est. 1 year	
CL-16.2.2 Develop an incentive program for residents to install and utilize composting systems.	WRS	**Start:** 2031 **Complete:** 1-2 years	
CL-16.3 Expand consistent access to food for Tumwater community members.	WRS	**Start:** 2025	
CL-16.3.1 Coordinate with the Food Bank to expand access to food assistance services.	WRS	**Start:** 2025 **Complete:** est. 1-3 years	
CL-16.3.2 Conduct community outreach to find gaps and barriers in consistent access to nutritious food.	WRS	**Start:** 2026 **Complete:** est. 1 year