

# PLANNING COMMISSION MEETING AGENDA

#### Online via Zoom

Tuesday, February 11, 2025 7:00 PM

- 1. Call to Order
- 2. Roll Call
- Changes to Agenda
- 4. Cancellation of Regular February 25, 2025, Commission Meeting
- 5. Commissioner's Reports
- 6. Deputy Director's Report
  - a. Ongoing 2025 Planning Commission Meeting Schedule
- 7. Public Comment
- 8. Food System Plan Update
- 9. 2025 Comprehensive Plan Periodic Update Climate Element
- 10. Next Meeting Date Joint Meeting with City Council, 02/25/2025, at 5 PM, Transportation Plan Tour
- 11. Adjourn

#### **Meeting Information**

The public are welcome to attend in person, by telephone or online via Zoom.

#### **Watch Online**

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#### **Public Comment**

The public is invited to attend the meeting and offer comment. The public may register in advance for this webinar to provide comment:

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After registering, you will receive a confirmation email containing information about joining the webinar.

The public may also submit comments prior to the meeting by sending an email to: cdd@ci.tumwater.wa.us. Please send the comments by 1:00 p.m. on the date of the meeting.

Comments are submitted directly to the Commission Members and will not be read individually into the record of the meeting.

If you have any questions, please contact Planning Manager, Brad Medrud at (360) 754-4180 or bmedrud@ci.tumwater.wa.us.

#### **Post Meeting**

Audio of the meeting will be recorded and later available by request, please email CityClerk@ci.tumwater.wa.us.

#### **Accommodations**

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#### What is the Planning Commission?

The Tumwater Planning Commission is a citizen advisory commission that is appointed by and advisory to the City Council on the preparation and amendment of land use plans and implementing ordinances such as zoning. Actions by the Planning Commission are not final decisions; they are Commission recommendations to the City Council who must ultimately make the final decision. If you have any questions or suggestions on ways the Commission can serve you better, please contact the Community Development Department at (360) 754-4180.

#### **Decorum Statement**

Welcome to the Planning Commission meeting. We thank you for attending.

The City Council encourages community engagement in local government and provides a variety of ways to participate.

The Chair of the Planning Commission will be responsible for conducting orderly and efficient meetings within the scheduled time. To accomplish that, the Chair will maintain order and decorum and can regulate inappropriate debate, repetitious discussion, and disruptive behavior when needed.

The Chair will recognize those that wish to speak and may limit the time allowed for individual comments. City staff will record questions and comments during the meeting. If an issue or question cannot be addressed during the meeting, City staff will address the issue or respond to the question by following up with the individual.

We respectfully request that attendees refrain from disruptions during the meeting and comply with decorum rules.

Thank you for participating.

Item 6a.

## **DRAFT** TUMWATER PLANNING COMMISSION - 2025 MEETING SCHEDULE

Note: Schedule is tentative and subject to change; Updated 1/21/25

<u>MEETINGS</u>	AGENDA ITEMS
January 14,2025	Work Session: 2025 Comprehensive Plan Update Climate – Brad/Alyssa
January 28, 2025	[Cancelled Meeting]
February 11, 2025	Work Session: 2025 Comprehensive Plan Update Climate – Brad/Alyssa Work Session: Food System Plan – Dana
February 25, 2025	Joint Tour with City Council: 2025 Comprehensive Plan Update Transportation – Brad/Dana
March 11, 2025	Work Session: 2025 Comprehensive Plan Update Climate – Brad/Alyssa Work Session: 2025 Comprehensive Plan Update Housing – Brad/Erika
March 25, 2025	Work Session: 2025 Comprehensive Plan Update Conservation – Brad/Alex
April 8, 2025	Work Session: Food System Plan – Dana Work Session: 2025 Comprehensive Plan Update Land Use– Brad/Erika
April 22, 2025	Work Session: 2025 Comprehensive Plan Update Lands for Public Purposes/Utilities – Brad/Erika
May 13, 2025	Work Session: 2025 Comprehensive Plan Update Housing – Brad/Erika
May 27, 2025	Work Session: 2025 Comprehensive Plan Update Development Code – Brad/Erika
June 10, 2025	Work Session: 2025 Comprehensive Plan Update Land Use– Brad/Erika
June 24, 2025	Work Session: 2025 Comprehensive Plan Update User Guide– Brad/Dana
July 8, 2025	Work Session: Food System Plan – Dana  Work Session: 2025 Comprehensive Plan Update Transportation – Brad/Dana  Work Session: 2025 Comprehensive Plan Update Development Code – Brad/Erika
July 22, 2025	
August 12, 2025	
August 26, 2025	
September 9, 2025	
September 23, 2025	
October 14, 2025	
October 28, 2025	Briefing: 2025 Comprehensive Plan Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika
Monday, November 10, 2025	<u>Discussion</u> : 2026 Work Program – Brad/Dana/Erika <u>Joint Work Session with City Council</u> : 2025 Comprehensive Plan Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika <u>Discussion</u> : Election of New Planning Commission Chair and Vice Chair - Brad

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-	November 25, 2025	<u>Joint Work Session with City Council</u> : 2026 Work Program – Brad/Dana/Erika <u>Work Session</u> : 2025 Comprehensive Plan Update (Ordinance No. O2025-0XX) –  Brad/Dana/Erika
	December 9, 2025	Hearing: 2025 Comprehensive Plan Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika
	December 23, 2025	[May Cancel Meeting]

January 13, 2026 -

Item 6a.

Briefing: 2025 Development Code Update (Ordinance No. O2025-0XX) -- Brad/Dana/Erika

<u>Joint Work Session with City Council</u>: 2025 Comprehensive Plan Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika

January 27, 2026 – <u>Work Session</u>: 2025 Development Code Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika February 10, 2026 – <u>Work Session</u>: 2025 Development Code Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika

February 24, 2026 – Hearing: 2025 Development Code Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika

March 10, 2026 – <u>Joint Work Session with City Council</u>: 2025 Development Code Update (Ordinance No. O2025-0XX) – Brad/Dana/Erika

#### Notes:

The following will need to be scheduled on the Planning Commission meeting schedule:

- Comprehensive Plan Update Economic Development Brad
- Thurston County Code Title 22 Tumwater Urban Growth Area Zoning The City completed a draft review of what needs to be updated in Title 22, and it is waiting for Thurston County to schedule it in its work program Brad/Dana/Erika
- Planning Commissioner Training Brad

TO: Planning Commission

FROM: Dana Bowers, Associate Planner

DATE: February 11, 2025

SUBJECT: Food System Plan Update

#### 1) Recommended Action:

No action is requested. This is an update with the consultant about the initial steps in the process of developing a Food System Plan for the City.

#### 2) Background:

The City Council included the preparation of a City Food System Plan to address community concerns with food insecurity on the local level on the 2025 Long Range Planning Work Program.

City staff have been working with our consultant Rebeca Potasnik to prepare a Plan that focuses on supporting ways to access food more effectively and consider the role of local and community-based agriculture activities, such as community gardens and local producers and processers to build a more resilient food system.

The Plan will focus on how to provide healthy food to the community, reduce food waste, support local food processing, eliminate barriers, address gaps in the current system, produce solutions to implement at appropriate scale, and identify how to maintain and update resource materials through jurisdictional and community partners.

The Planning Commission was originally briefed on the project on November 26, 2024. This following up work session with the Planning Commission will provide an update of the community members interviewed thus far, plans for a survey to broaden outreach to more subject matter experts. The General Government Committee will receive a similar briefing at their March 18, 2025, meeting.

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■ None

#### 4) Attachments:

- A. Staff Memorandum
- B. Consultant Memorandum

# **MEMORANDUM**

Date: February 11, 2025
To: Planning Commission

From: Dana Bowers, Associate Planner



## Addressing Food Insecurity and Access to Food

The City Council approved the developing a Food System Plan as part of the 2024 and the 2025 Long Range Planning Work Programs. Rebeca Potasnik was brought on as a consultant to assist with the development of the Plan. The intent of the Plan is to review the current food landscape in Tumwater and describe key challenges, developments, current collaborations, and opportunities.

## <u>Methodology</u>

The City Council directed that the work on the Plan focus on the following priorities:

- Providing healthy food for all members of the community;
- Reducing food waste; and
- Supporting local food production and processing

The Plan also needs to follow guiding principles which align with the City of Tumwater Vision and Values, which include:

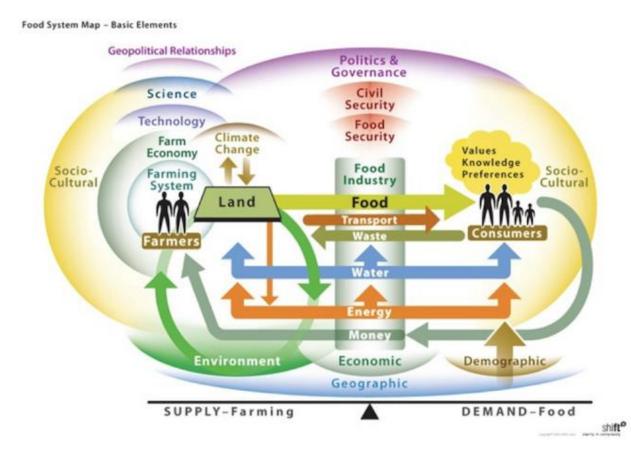
- Equity. A food system should support food security with an emphasis on those community members that experience the greatest inequities.
- **Sustainability**. A balance between environmental health, economic profitability, and social equity creates a resilient food system that meets current food needs without compromising the ability of future generations to meet their own needs.
- Stability. All community members should have reliable access to sufficient, safe, appropriate, and nutritious food, even in the face of unexpected challenges.
- **Resiliency**. The food system should maintain its functionality and continue to provide food security and nutrition under various adverse conditions.

• **Efficacy**. The audience for the plan is the City of Tumwater, therefore, the objectives and actions in this plan will be the areas where this level of government can have the most impact.

## **Project Update**

Since August 2024, the consultant has been crafting a key contributor list, balancing input between each of the sectors associated with the food system: food processing and production, hunger relief, nutrition, food waste reduction and rescue, policies, and regulations. The consultant also focused on local contacts while keeping in mind that the food system relies on regional partnerships as well.

The figure below illustrates the complex nature of food systems and how interconnected they can be. Many of the contacts in our local food system represent multiple parts of the system, acting as a producer, a transporter, and participant in governance.



Any subject matter experts identified by the Planning Commission and City Council will be added to the key contributor list. The consultant also noted that broad public engagement is outside the scope of this project. A list of subject matter experts contacted and planned for contact is included in the consultant memorandum (Attachment B).

The consultant's contract has been extended to December 2025 to address work needed to address subject matter experts providing new contacts which were added to the list. To keep a balance of subject matter experts the contractor made extensive matrices to track the connections between each part of the food system.

Work to review existing plans and literature is also underway. The recommendations and actions will be weighed against the project priorities and guiding principles for inclusion in the Food System Plan strategies. A list is provided in the consultant memorandum (Attachment B).

## **Timeline**

The term of the project is until December 2025. Since the Comprehensive Plan periodic update is due in December, completing work on the Food Service Plan and incorporating its recommendations into the Comprehensive Plan before adoption would be ideal. The timeline below provides the project schedule, which will conclude work on the Plan by July 2025.

Deliverables	Expected Completion
Community Food Assessment	March – April 2025
Food System Plan's Goals and Objectives	April – May 2025
Food System Plan Strategies	May – June 2025
Food System Plan Complete	June – July 2025

## **City of Tumwater Food System Plan**

### Project Update, February 2025

I'm still in the thick of community engagement and exploring Tumwater's current food system including the natural, physical/built, political, and social aspects. This work will inform a Community Food Assessment which will synthesize information obtained from interviews, an online survey, and my review of relevant materials. The assessment will provide an inventory and evaluation of the current landscape as well as describe key challenges, developments, current collaborations, and opportunities. The key findings from this assessment will inform the strategies addressed in the Food System Plan.

**Interviews.** I've been conducting interviews with subject matter experts (SME) regarding food processing and production, hunger relief, nutrition, food waste reduction/rescue, policies, and regulations. These areas align with the City's stated parameters for this project to address food security at the local level by focusing on 1) how to provide healthy food for all members of the community, 2) reduce food waste, and 3) support local food production and processing. Additionally, SME were selected that reinforced the guiding principles of producing a Food System Plan grounded in equity, sustainability, stability, resiliency, and efficacy. During the interview process, interviewees sometimes identified other key SME which I added to my list.

The following table lists those interviewed to date. Note: there are a few additional SME with whom I am in the process of scheduling meetings.

- · recipients of hunger relief services
- Khurshida Begum, Executive Director, ASHHO Cultural Community Center
- John Peters, Managing Member & Lead Developer, Tumwater Craft District
- Jade Monroe, Use Food Well Washington Center Lead, WA Dept of Ecology
- Kristen Maring, Lead Instructor Tumwater FRESH Program (Farm Rooted Education for Sustainability & Health), Tumwater High School

	NAME	TITLE	AFFILIATION
1	Jen Ownbey	Owner/Baker	8 Arms Bakery
2	Alyssa Jones Wood	Sustainability Manager	City of Tumwater
3	Todd Anderson	Parks & Recreation Manager	City of Tumwater
4	Margaret Garrett	Farm to School Coordinator	Educational Service District 101
5	Meredith Arseneau	Child Nutrition Cooperative Mentor	Educational Service District 113
6	Peter Epperson	Retired	Formerly with Catholic Community Services, Thurston County Public Works, Thurston Community Television, Senior Services for South Sound, United Way Mason County
7	LeeAnn Perry	Founder	Little Free Pantry

8	Robby Rutledge	Owner/Farmer	Rutledge Family Farm
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9	Stephanie Penland	Senior Nutrition Program Director	Senior Services of South Sound
10	Mitch Lewis	Owner/Farmer, Board President	Summit Farms, Tumwater Farmers' Market
11	Michaela Winkley	School Gardens Program Coordinator	Thurston County Food Bank
12	Rebekah Graham	Satellite Coordinator	Thurston County Food Bank
13	Mackenzie McCall	Agricultural Resources Supervisor, Network Leader	Thurston County Food Bank, South Sound Food System Network
14	Hope Springer	Waste Reduction & Recycling Specialist	Thurston County Public Works
15	Maggie Brown	Waste Reduction & Recycling Specialist	Thurston County Public Works
16	Tina Sharp	Regional Agricultural Development Manager	Thurston Economic Development Council
17	Cathy Visser	Dietician/Consultant	True for You Nutrition, LLC. Formerly with South Sound Food System Network & Senior Services for South Sound
18	Bob Gibson	Food Service Supervisor	Tumwater School District
19	TJ Johnson	Owner/Farmer, Board Chair	Urban Futures Farm, Thurston Conservation District
20	Treacy Kreger	Owner, Founder South Sound Fresh	Vern's Foods, Our Community Kitchen, South Sound Fresh
21	Katie Rains	Food Policy Advisor to the Director	Washington State Dept of Agriculture
22	Theresa Kimball	Owner/Farmer	Wild Fun Farm
23	Annie Salafsky	Agriculture & Natural Resources Educator	WSU Extension Thurston County, Southwest Washington Growers Cooperative. Former Co-Owner/Farmer Helsing Junction Farm
24	Marilyn Sitaker	Food Systems Researcher & Program Coordinator	WSU Thurston County Extension, Southwest Washington Food Hub

**Survey.** An online survey will be going out to additional SME in February. The survey will focus on the same topics explored with others via interviews. The following table lists the SME who will receive the survey. Additional SME identified by the Planning Commission, City Council, and staff are welcome. Please keep in mind that to maximize this project's resource constraints, the methodology does not include broad public engagement.

	NAME	AFFILIATION
1	Rae Lee	Adventist Community Service Center
2	Kelly Wilson	All Kids Win
3	Mark Clark	Bush Prairie Farm
4	Jaspar Quinton	Catholic Community Services
5	Richard Calkins	Catholic Community Services
6	Rhys Roth	Center for Sustainable Infrastructure
7	Cristian Salazar	CIELO
8	Dalila Vasquez	CIELO
9	Diana Torres	CIELO
10	Brian Hurley	Thurston County Local Emergency Planning Committee
11	Shawn Crimmins	Thurston County Local Emergency Planning Committee
12	Jennifer Colvin	Colvin Ranch
13	Loretta Seppanan	Community Farm Land Trust
14	Leslie Price	Community Wellness, Thurston County
15	Evan Kavanaugh	Community Youth Services
16	Muhammad Ayub	Dancing Goats And Singing Chickens Organic Farm
17	Brighida DeVargas	Eastside Urban Farm & Garden
18	Beth Henriquez	Enterprise for Equity
19	Tanikka Watford	Enterprise for Equity, The Moore Wright Group, Deep Roots Foods
20	Megumi Sugihara	Everyone's Food Sovereignty Alliance
21	Mark Goebel	Family Education and Support Services
22	Rosa Venancio	Family Education and Support Services
23	Shelly Willis	Family Education and Support Services
24	Joel Hansen	former Tumwater Planning Commission member, Tumwater Farmers Market, Thurston Union of Low Income People
25	Leland Harmell & Lucas Nipper	Fresh Perspective
26	Kerensa Mabwa	GRuB Growing Home Collective
27	Deb Crockett	GRuB, South Sound Food System Network
28	Mercy McGee	Haki Farmers Collective
29	Jessica Armstrong & Angie Camp	Helsing Junction Farm
30	Chad Johnson	Mountain View Church
31	Maegan Cote	Mountain View Church

32	Cristina Vermeer	North Star Church of God
33	Tony & Kira DeRito	Olympia Seafood, Craft District
34	Peter Guttchen	retired, waste prevention specialist
35	Jenni Crain	Slow Food Greater Olympia
36	Chris Hyde	Souper Sunday
37	Kyle Rogers	South Puget Sound Intertribal Planning Agency
38		SPSCC Early Learning / Child & Family Education Center
39	Nate	Spud's Produce Market
40	Leejay & Lea Lee	Sweet Lee's Ice Cream, Craft District
41	Aherlow Kasjaka	Thurston Asset Building Coalition
42	Juanita MacNaughton	Thurston Chamber of Commerce, Food Production sector WorkSource Business Solutions Navigator
43	Tina Wagner	Thurston Conservation District, Farm My Yard Program
44	Al Quiocho	Thurston County Public Health & Social Services
45	Raymona Smiedala	Thurston County Public Health & Social Services
46	Advisory Committee	Thurston County Solid Waste
47	Cherie Carey	Thurston County, Emergency Management
48	Meghan Sullivan	TOGETHER!
49	Jake Yancey	Tracking Y Ranch
50	Brooke Pugliese	Tumwater Farmers Market
51	Carrie Lerud	Tumwater Rotary
52	Lee Hagen	Tumwater United Methodist Church
53	Anita & Pieter de Boer	Tunawerth Creamery
54	Chris Wells	United Way of Thurston County
55	Kyle Taylor Lucas	Urban Indians Northwest
56	Dani Madrone	Washington State Conservation Commission
57	Christine Ciancetta	Washington State SNAP-ed
58	Carissa Miller & Jasper Pease	Withywindle Valley Farm
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Overview of Existing Work. I am referencing work accomplished to date that is relevant to the Community Food Assessment and subsequent Food System Plan. The following list is organized by publication date to reflect the progression of work over time (2011 to 2024). I welcome input regarding other materials to review to inform this project provided they are grounded in the feasibility of what can be accomplished at the municipal level.

- The Evergreen State College Ecological Agriculture Students. 2011. *Food Summit Recommendations*. The Evergreen State College.
- Sustainable Thurston. January 2012. *Local Food Systems Panel White Paper*. Thurston Regional Planning Council.
- Sustainable Thurston. December 2013. *Creating Places, Preserving Spaces: A Sustainable Development Plan for the Thurston Region*. Thurston Regional Planning Council.
- Thurston Thrives Food Action Team. October 2015. 2014 Food System Report. Thurston Asset Building Coalition, Thurston Food System Council, and Thurston Thrives.
- Young Producers Network. 2016. *Let's Talk Trash (Episode II)*. Video. 17:15. Thurston Community Media. <a href="https://www.youtube.com/watch?v=M1zY60bISFo">https://www.youtube.com/watch?v=M1zY60bISFo</a>
- Beiker, C., N. Calene, K. Kitzke, E. Hannum, K. Unland, J. Clark, M. Wynne, and L. Moulder. 2016. *Spokane Regional Food System Inventory*. Spokane Food Policy Council.
- Sustainable Thurston. February 2019. *Creating Places, Preserving Spaces: An Implementation Status Report for the Sustainable Thurston Plan*. Thurston Regional Planning Council.
- South Sound Food System Network. 2020. *History of the South Sound Food System Network*. PowerPoint Presentation. South Sound Food System Network Meeting. September 2, 2020.
- City of Tumwater. 2021. Tumwater City Plan 2036 Conservation Element. City of Tumwater.
- Whatcom County Food System Committee and Staff. December 2021. Whatcom Community Food Assessment: 2021 Report Update. Whatcom Food Network.
- Monroe, Jade, M. Harrington, and K. Patora. 2022. *Use Food Well Washington Plan*. Washington State Department of Ecology.
- Spokane Food Policy Council. 2022. *Spokane Regional Food Action Plan 2022*. Spokane Food Policy Council.
- Roth, R., M.P. Wolcott, G.G. Yorgey, J.L. Male, T. Sturdevant, D. Camenzind, F. Pierobon, J. Padowski, C.E. Kruger, A. Whittemore, T. Carroll, K. Jensen, S. Moddemeyer, and A. Ybarra. 2023. *Increasing the Economic Value and Sustainability of Washington's Agricultural Sector through Industrial Symbiosis: A report to the Washington Legislature*. WSU Center for Sustaining Agriculture and Natural Resources, WSU Institute for Northwest Energy Futures, Richland, WA.
- Whatcom County Food System Committee and New Venture Advisors. July 2023. Whatcom County Food System Plan: A 10 year plan for an equitable and sustainable food system. Whatcom Food Network.
- AHBL, Inc, ECOnorthwest, C. Ziegler, K. Gardow, and A. Peterson. 2024. Urban Farm Park Study. City of Olympia.
- City of Tumwater. July 2024. *Draft Land Use Element: Goals, Policies, and Implementation Actions. City of Tumwater 2025 Comprehensive Plan.* City of Tumwater.

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Salafsky, A., S. Bramwell, A. Meade, W. Uyeda, K. Gaffi, and T. Sharp. 2024. *Pac Mountain Region Agriculture Labor Survey Findings*. WSU Extension, Thurston Economic Development Council, Garden-Raised Bounty (GRuB), Pac Mountain Workforce Development Council.

WSU Extension, Thurston Economic Development Council, and Garden-Raised Bounty (GRuB). 2024. Quality Jobs, Equity, Strategy and Training (QUEST) Sector Partnerships Final Report. Pac Mountain Workforce Development Council.

<u>Timeline of Deliverables.</u> This timeline has been updated to reflect the longer period that has been necessary to identify and consult with SME via interviews and surveys and to analyze the data.

ACTIVITIES	TIMEFRAME
Identify and consult with Subject Matter Experts (SMEs)	October - February
Inventory current landscape and resources.	October - February
Examine relevant policies and plans.	October - February
Report key findings in a Community Food Assessment.	March/April
Develop the Food System Plan's goals and objectives.	April - May
Develop and prioritize strategies in the Food System Plan.	May - June
Prepare final report and other materials.	June - July

**Contact Information.** You can reach me by email or phone:

- 360-977-0476 (call/text)
- Rebeca.Potasnik@gmail.com

TO: Planning Commission

FROM: Alyssa Jones Wood, Sustainability Manager

DATE: February 11, 2025

SUBJECT: 2025 Comprehensive Plan Periodic Update – Climate Element

#### 1) Recommended Action:

This is a discussion item about the first draft of the new Climate Element for the 2025 Comprehensive Plan periodic update.

#### 2) Background:

On a ten-year cycle, the City is required to conduct a Growth Management Act periodic update of its Comprehensive Plan and related development regulations.

The updated Comprehensive Plan will address diversity, equity, and inclusion throughout the Plan. <u>2025 Comprehensive Plan Update | City of Tumwater, WA</u> has links to guidance materials and information about the update.

The intent of this work session item is to gather feedback from the Planning Commission on the draft Climate Element goals, including policy and action timelines related to the Climate Resilience Subelement, and for staff to provide an update on the City's progress in preparing a Climate Element.

#### 3) <u>Alternatives</u>:

■ None.

#### 4) Attachments:

- A. Staff Report
- B. Draft Climate Element Goals, Policies, and Implementation Actions
- C. Draft Climate Element Technical Information
- D. Presentation

# STAFF REPORT

Date: February 11, 2025
To: Planning Commission

From: Alyssa Jones Wood, Sustainability Manager



## 2025 Comprehensive Plan Update – Climate Element

On a ten-year cycle, the City must conduct a Growth Management Act periodic update of its Comprehensive Plan and related development regulations. Following the timeline for the Climate grant contract with the Washington Department of Commerce, the City must complete a draft of the new Climate Element by June 30, 2025.

The updated Comprehensive Plan will address diversity, equity, and inclusion throughout the Plan and incorporate a large number of state-required changes addressing housing, climate change, and other topics.

The draft Climate Element is currently open for public comment from all community members, until January 31, 2025. It can be found on the City's website <a href="2025 Comprehensive Plan Update">2025 Comprehensive Plan Update</a> | City of Tumwater, WA.

The intent of this agenda item before the Planning Commission work session on February 11, 2025, is to discuss the draft goals, policies, actions, and associated timelines of the Resilience sub-element of new Climate Element.

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### 1. New Requirements

On May 3, 2023, Governor Inslee signed into law HB 1181, which added a new climate change and resiliency goal to the Growth Management Act. The City will need to adopt a new Climate Element as part of 2025 Comprehensive Plan periodic update by December 31, 2025, to meet the state deadline.

The legislation includes the following key changes:

- Adds as climate mitigation sub-element to address greenhouse gas emissions reduction
  as part of a Climate Element that is mandatory for the City and would require actions to
  reduce overall greenhouse gas emissions and vehicle miles traveled. The City must use
  2022 as their emissions baseline year and set incremental targets that lead to achieving
  net zero emissions in 2050, consistent with Washington's statewide target.
- Adds a climate resilience sub-element as part of a Climate Element that is mandatory for the City. The Thurston Hazards Mitigation Plan, which was updated and adopted by the City in 2024, can be adopted, by reference, to satisfy the climate resilience sub-element requirements.
- Requires consideration of environmental justice as part of the development of a Climate Element to avoid worsening environmental health disparities.

## 2. Growth Management Act - Climate Change and Resiliency Goal

The state Growth Management Act (Chapter 36.70A RCW) requires that the City show 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 the City's Comprehensive Plan and development regulations.

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

14. 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 increasing climate resiliency by promoting sustainability, reducing pollution, promoting health habitats, and supporting clean air and water.

#### 3. Sub-Elements

The Climate Element will need to incorporate two sub-elements: climate mitigation, which addresses greenhouse gas reduction, and climate resilience.

## A. Climate Mitigation

Climate mitigation addresses greenhouse gas emission reductions that involve actions taken to reduce or eliminate the emissions of greenhouse gases to reduce the rate and extent of climate change damage.

Greenhouse gases (GHG) include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other gas or gases designated by the State Department of Ecology.

Increasing emissions of carbon dioxide and other greenhouse gases are changing the City's climate in ways that will impact both human and natural systems. In general, we can expect to experience hotter, drier summers and warmer, wetter winters. These changes are expected to worsen existing hazards—like floods, landslides, and wildfires—and introduce new threats—like invasive plants, insects, and infectious diseases.

To ensure that the City significantly reduces local contributions to climate change, the Thurston Regional Planning Council, Thurston County, and the cities of Lacey, Olympia, and Tumwater adopted the following greenhouse gas emissions reduction targets in 2021 as part of the Thurston Climate Mitigation Plan (TCMP):

- Forty-five percent reduction below 2015 levels by 2030; and
- Eighty-five percent below 2015 levels by 2050.

The City adopted the Thurston Climate Mitigation Plan in 2021, the actions of which will be updated and incorporated into the climate mitigation sub-element of the City's new Climate Element. Note that the Plan's goals and baseline are not consistent with the new statewide requirements for a 2022 baseline year and net-zero by 2050 goal.

The figure below is from the Thurston County 2022 GHG Emissions Inventory (by the Department of Commerce) and show current GHG emissions and the breakdown of GHG emissions by sector.

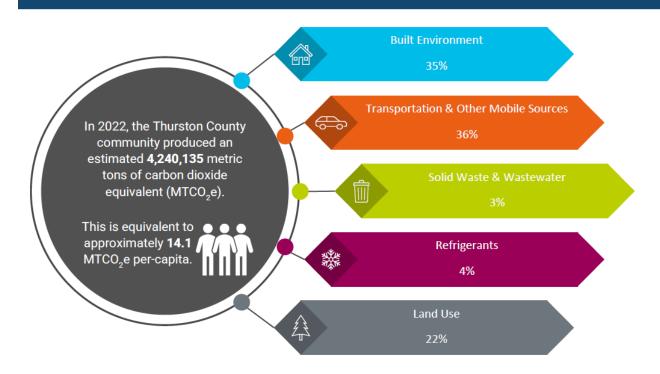


Figure 1. 2022 Emissions by Sector

The Department of Commerce has identified the following three pathways to meet the new state requirement for a climate mitigation sub-element.

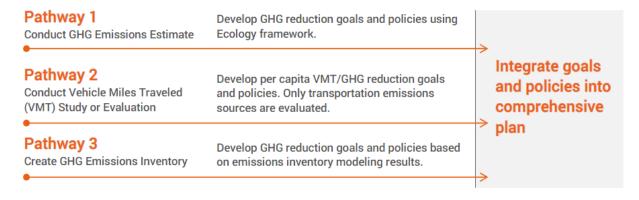


Figure 2. Pathway summary for GHG sub-element.

Staff will pursue pathway one and supplement the Tumwater GHG estimate with the 2022 Thurston County GHG Emissions Inventory provided by the Department of Commerce. Department of Commerce staff have confirmed that this method is acceptable for meeting requirements.

#### B. Climate Resilience

RCW 70A.65.010 defines climate resilience as:

"...the ongoing process of anticipating, preparing for, and adapting to changes in climate and minimizing negative impacts to our natural systems, infrastructure, and communities. For natural systems, increasing climate resilience involves restoring and increasing the health, function, and integrity of our ecosystems and improving their ability to absorb and recover from climate-affected disturbances. For communities, increasing climate resilience means enhancing their ability to understand, prevent, adapt, and recover from climate impacts to people and infrastructure."

The Department of Commerce has identified the following five step process to meet the new state requirement for a climate resilience sub-element.



Figure 3. Steps and pathways to integrate resilience into Comprehensive Plan.

The Thurston Hazards Mitigation Plan with the City of Tumwater Annex was adopted by the City Council in March 2024. The Thurston Hazards Mitigation Plan addressed Steps 1 through 3 and is in substantial conformance with the state guidance, so in Step 4, the City will be adopting the Plan, by reference, to satisfy the state climate resilience sub-element requirements.

In addition, the Thurston Regional Planning Council adopted the Thurston Climate Adaption Plan in 2018, the actions of which will be updated and incorporated into the climate resilience sub-element of the City's new Climate Element.

Staff and consultants will also use the Department of Commerce Climate Element Workbook to ensure any gaps between state requirements and previously developed content from the Thurston Hazards Mitigation Plan and/or Thurston Climate Adaptation Plan will be investigated and addressed.

#### 4. Environmental Justice

The new state legislation requires that the Climate Element must:

- Prioritize greenhouse gas reductions in overburdened communities.
- Prioritize climate resilience in communities that will disproportionately suffer from compounding environmental impacts.

In addition, HB 1181 requires that as part of the required Comprehensive Plan periodic update process that:

- The Land Use Element avoids worsening environmental health disparities.
- The Transportation Plan ensures multimodal levels achieve environmental justice goals.

## 5. Transportation and Land Use Changes

In addition, the new state legislation requires other transportation and land use changes such as:

- Requiring that the Washington State Department of Transportation keep a summary of the per capita vehicle miles traveled for cities and the unincorporated portions of counties. This resource will in turn support the required updates to the Transportation Plan and the new Climate Element.
- Adds multimodal concurrency.
- Must accommodate all users "safely, reliably and efficiently."

## 6. Goals, Policies, and Implementation Actions Review

#### A. Introduction

Example from the current Climate Element:		
GOAL CL-2	Increase the City's capacity to implement climate action and adaptation priorities.	
<u>Policy</u>	<u>Action</u>	
CL-2.2	Develop a program funding strategy to support equitable access to climmitigation and adaptation programs developed by the City.	
	CL-2.2.1.	Review actions outlined in the Climate Element to determine what kinds of funding will be needed to support the programs created therein.

Goals and policies describe how the City proposes to address identified needs. Goals are statements of desired outcomes or intended achievements. Policies are specific statements that guide actions and provide a framework for future decision-making. Actions are specific implementations of goals and policies.

## B. Policy Strength Continuum

When developing goals and policies, it is important to understand the policy strength continuum. The Puget Sound Regional Council developed the following example.

Passive	Policy Strength	Active
Statements of Inclination	Statements of Principle	Statements of Impact
Conveys intent, but establishes no target or definition of success	Describes clear targets or conditions of success	Go further, describing specific situations where protecting critical areas is a priority
Example  The City shall encourage protection of prairie lands.	Example  The City shall endeavor to support the maintenance of 100-acres of conservation land.	Example  Work with nonprofits to support active maintenance of prairie conservation lands to protected habitat standards.

#### C. Draft Time Period and the Climate Crisis

The Tumwater City Council passed resolution No. R2021-002 on January 19, 2021, which declared a climate emergency and support for the mobilization of community and region wide efforts to mitigate climate change in order to provide a safe environment for future generations. All aspects of the Climate Element – climate mitigation, adaptation, environmental justice, and equity – are exceptionally urgent issues requiring action and system change on a local and global level. However, unilateral actions taken without adequate community engagement and ownership often leads to unintended consequences and harm. Also, system change – which is the most pivotal to addressing these urgent issues – takes time that is tragically not well aligned with the urgency of the climate crisis.

The City of Tumwater, and all governments working on climate change, are faced with a paradox of the urgency of action and the necessity of working at the speed of trust with community, especially those in the community who have been historically marginalized, left out, or forgotten. Staff have done their best to balance the urgency of action, the expected speed of trust for actions, community demand, existing commitments (GHG targets), and internal capacity to draft timelines for each action in the Climate Element. Bringing this paradox to light is not intended to be interpreted as a justification, but rather a careful consideration and nuance that staff are incorporating into their work as they address the climate crisis.

#### D. Initial Review

Attachment B is the initial draft of the Climate Element. This draft has been reviewed by staff and the Climate Policy Advisory Team (CPAT). This draft is concurrently being reviewed by the Planning Commission and the community at large. This draft is not final, and feedback provided by the community and Planning Commission will be incorporated as much as possible.

## Appendix A - Guidance

The State Department of Commerce has provided guidance specific to the periodic update on their Periodic Update webpage.

https://www.commerce.wa.gov/serving-communities/growth-management/periodic-update/

<u>www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics</u>

The State Department of Commerce has a webpage for Climate Element guidance.

https://www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics/climate-change-2/

In addition, the Puget Sound Regional Council is conducting a series of workshops on a variety of topics related to the periodic update.

www.psrc.org/our-work/passport-2044-comprehensive-plan-workshop-series)

The Municipal Research Services Center has a Comprehensive Planning webpage as well as webpage addressing the new legislative requirements.

https://mrsc.org/getdoc/d7964de5-4821-4c4d-8284-488ec30f8605/Comprehensive-Planning.aspx

MRSC - New Legislation Related to Climate and the Natural Environment

Attachment B

# **Climate Element**

Goals, Policies, and Implementation Actions

# City of Tumwater 2025 Comprehensive Plan

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

DRAFT VERSION
Updated December 31, 2024

December 2024

Ordinance No. O2025-0XX







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Goals, Policies, and Implementation Actions



## Acronyms and Abbreviations Used in Document

**ASD** – Administrative Services Department.

#### **CBO – Community Based Organization**

**CCA** – The <u>Climate Commitment Act</u> (CCA) (Chapter 310, Laws of 2021) caps and reduces GHG 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 GHG 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 GHGs. 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

Goals, Policies, and Implementation Actions



**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.<sup>1</sup>

**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.

<sup>&</sup>lt;sup>1</sup> 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





**Frontline Community<sup>2</sup>:** 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.

**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 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.<sup>3</sup>

**Overburdened Community**<sup>4</sup>: 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. 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.

<sup>&</sup>lt;sup>2</sup> 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

<sup>&</sup>lt;sup>3</sup> United States Department of Agriculture, n.d. "What is a native plant?" https://www.usda.gov/peoples-garden/gardening-advice/why-native-species-matter

<sup>&</sup>lt;sup>4</sup> See Note 1





**Vulnerable Populations**<sup>5</sup>: 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.



<sup>&</sup>lt;sup>5</sup> See Note 1

Goals, Policies, and Implementation Actions



## 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

The City'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 and actions.

The remaining document presents each goal in full detail, with introductory text, explanation of the lead and timeline for each policy and implementation action, and identification of priority items.

Actions and policies are marked with the appropriate icon if they fall into any of the below categories:



#### **Equity-focused Action**

Action helps the City achieve equity goals. These actions include financial programs, outreach activities, legislative changes, and other strategies designed to empower frontline and historically excluded communities to pursue climate adaptation and mitigation activities.



#### **Publicly Identified Priority**

Action was developed out of conversations with and feedback from Tumwater community members. Community members contributed their input through an in-person workshop, a virtual open house, and a Climate Policy Advisory Team (CPAT) that worked closely with the City to develop specific policy language.

Goals, Policies, and Implementation Actions



## 2. Growth Management Act – Element Goals

The State Growth Management Act (Chapter 36.70A RCW) requires that the City show 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 the City'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.

Goals, Policies, and Implementation Actions



## 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.

Goals, Policies, and Implementation Actions



- 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.

Goals, Policies, and Implementation Actions



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

The Climate Element is based upon the themes of equity, sustainability, and resilience.



Goals, Policies, and Implementation Actions



## 4. Summary of Element Goals

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

Goals are not listed in order of priority.

## A. Overarching Climate Goals

- Goal CL-1 Ensure 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.
- Goal CL-2 Increase the City's capacity to implement climate action and adaptation priorities.
- 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.

## B. Greenhouse Gas Reduction 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.
- 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.
- Goal CL-6 Reduce greenhouse gas emissions by making it easier for people to shift to low-/zero-carbon transportation modes through policy, programming, and regional partnerships.
- 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 throughout and beyond Tumwater.





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.

#### C. Climate Resilience Goals

- Goal CL-9 Ensure that buildings and energy infrastructure can accommodate renewable energy opportunities, keep the community safe, and can withstand and recover from extreme weather and natural hazards worsened by climate change.
- Goal CL-10 Increase preparedness for acute climate impacts and improve the resilience of Tumwater's people and systems against climate hazards.
- Goal CL-11 Preserve, protect, and sustain cultural sites and resources in alignment with the values and needs of Tribes and frontline communities.
- Goal CL-12 With climate, growth, and environmental changes in mind, identify and elevate the protection of key habitats, ecosystem services, and wildlife corridors.
- Goal CL-13 Ensure that zoning and development decisions support compact urban development and city-wide resilience, including a resilient local economy.
- Goal CL-14 Ensure that the local transportation system, including infrastructure, routes, and non-motorized travel modes, fosters connectivity and can withstand and recover quickly from climate impacts.
- Goal CL-15 Protect and improve water quality and availability.
- 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.

Goals, Policies, and Implementation Actions



#### 5. Element Goals, Policies, and Implementation Actions

#### A. Overarching Climate Goals

Goal CL-1 Ensure 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's frontline communities<sup>6</sup> who experience the impacts of climate change "first and worst" are already feeling the burden of climate impacts, while having contributed the least to causing and worsening climate change. The City must create opportunities for members of frontline communities to make meaningful changes to climate policy and must also ensure frontline communities have access to resources to adapt to climate impacts.

Policies and Implementation Actions	Lead	Period	Notes
CL-1.1 Conduct intentional outreach with frontline communities to create opportunities for equitable engagement in climate adaptation, mitigation, and education.	WRS, Community Organizers	<b>Start:</b> 2025	<u>&amp; &amp;</u>
CL-1.1.1 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.	City	Start: 2025 Ongoing	8 8 A

<sup>&</sup>lt;sup>6</sup> Policies CL-1.1 and CL 1.3 and action CL-11.9.3 will help the City identify where Tumwater's frontline communities live, work, and play and form relationships within these communities and with existing CBOs that have existing relationships.



Policies and Implementation Actions	 Lead	 Period	Notes
CL-1.1.2 Create and implement tailored outreach and education initiatives that will empower frontline communities to respond to climate change threats.	WRS	Start: 2025 Complete: est. 2 years <sup>7</sup>	<u>8</u> 8
CL-1.1.3 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, Community Organizers	Start: 2025 Ongoing	& & A
CL-1.1.4 Conduct outreach and listening sessions in frontline communities to understand existing needs and opportunities and to educate on projected climate impacts.	WRS & ED	Start: 2026 Ongoing	<u>&amp; &amp;</u>
CL-1.2 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	<b>Start:</b> 2025	& & A
CL-1.2.1 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	<u>&amp; &amp;</u>

<sup>&</sup>lt;sup>7</sup> 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	Notes
CL-1.2.2 Plan and conduct community engagement activities to ensure all policies and tasks are co-created with the community and to share new plan information upon completion and update throughout implementation.	WRS	Start: 2025 Ongoing	<u>&amp; &amp;</u>
CL-1.3 Develop programs and resources to	WRS,	<b>Start:</b> 2026	8.8
promote equitable financial access to	Finance, &		
climate resilience and mitigation	ED		
activities.			
CL-1.3.1 Identify funding sources for	WRS,	<b>Start:</b> 2026	8 8
subsidies for overburdened	Finance, &	Complete:	
communities to offset costs	ED	est. 1-2	
associated with climate impacts and		years	
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.			
CL-1.3.2 Establish and initiate a process to	WRS	<b>Start:</b> 2027	8.8
consult with frontline communities		Complete:	
to identify ways to equitably		est. 3-5	
distribute climate funding.		years	

### Goal CL-2 Increase the City's capacity to implement climate action and adaptation priorities.

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

Poli	cies and Implementation Actions	Lead	Period	Notes
CL-2.1	Fully staff City positions needed to	WRS, EXD	<b>Start:</b> 2026	
	support the actions outlined in the			
	Climate Element.			



Policies and Implementation Actions	Lead	Period	Notes
CL-2.1.1 Review actions outlined in the Climate Element to determine whether additional support staff (including emergency management personnel) are required.	WRS, EXD	Start: 2026 Ongoing Every 2 years	Notes
CL-2.1.2 Fill any existing vacant positions that will allow implementation of Climate Element actions, and post and fill any positions identified in CL-2.1.1.	WRS, EXD	Start: 2026 Ongoing Every 2 years	
CL-2.1.3 Develop a fellowship position to help meet Element goals.	WRS, EXD	<b>Start:</b> 2027	
CL-2.2 Develop a program funding strategy to support equitable access to climate mitigation and adaptation programs developed by the City.	WRS, EXD	<b>Start:</b> 2026	<u>8</u> 8
CL-2.2.1 Review actions outlined in the Climate Element to determine what kinds of funding will be needed to support the programs created therein.	WRS, EXD	Start: 2026 Ongoing Every 2 years	
CL-2.3 Educate City Staff and the public on the Climate Element's goals, policies, and actions.		<b>Start:</b> 2025	
CL-2.3.1 Develop training materials for the City employees responsible for implementing actions outlined in the Climate Element. Require designated employees to undergo training and offer opportunities to ask clarifying questions.		Start: 2025 Ongoing	
CL-2.3.2 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.		Start: 2025 Ongoing	





#### Goal CL-3 Address that changing weather and climate patterns driven by humangenerated 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 GHG 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 and Implementation Actions	Lead	Period	Notes
CL-3.1 Assess and address the City's	WRS	<b>Start:</b> 2026	
vulnerability to climate change.			
CL-3.1.1 Conduct a comprehensive	WRS	<b>Start:</b> 2026	88
Vulnerability Assessment that		Complete:	
considers climate impacts to		est. 1 year	
communities, physical assets, and			
City operations and services, including impacts from extreme			
heat and flooding.			
CL-3.1.2 Utilize community outreach efforts	WRS	<b>Start</b> : 2026	
(see policies CL-1.1, CL-1.2) to	Wito	Implement	( کرف
discuss community climate impacts		: Ongoing	
and work with any community			
groups that desire additional			
adaptation or mitigation planning			
beyond existing city efforts.			
CL-3.1.3 Review climate impacts to City	WRS	<b>Start:</b> 2027	
operations and adjust operations		Complete:	
plans as needed to mitigate climate		est. 3-5	
impacts on services.	WDC	years	
CL-3.1.4 Develop and implement plans to	WRS	Start: 2027	
reduce impacts and vulnerabilities for any existing City facilities,		Complete: est. 10-15	
utilities, infrastructure, or other		years for all	
assets vulnerable to projected		facilities	
climate change hazard. Plans will			
incorporate renewable energy,			
green infrastructure, and other			
sustainable additions.			
CL-3.2 Address climate change impacts in all	WRS, CDD,	<b>Start:</b> 2027	
City planning efforts.	EXD		



Policies and Implementation Actions	Lead	Period	Notes
CL-3.2.1 Integrate planning methods that	WRS, CDD,	<b>Start:</b> 2027	
identify and prioritize multiple	EXD	Complete:	
potential adaptation pathways into		Ongoing	
all planning efforts to mitigate the			
risk of bad investments and account			
for changes in climate projections.			
CL-3.2.2 Develop a systematic review process	WRS, TED,	<b>Start:</b> 2028	
to assess the City's plan to build and	PRD, CDD,	Complete:	
maintain roads, buildings, utilities,	EXD	Ongoing,	
and other facilities for potential		every 2	
climate vulnerabilities to planned		years	
facilities, utilities, and infrastructure			
projects (e.g. the Capital Facilities			
Plan) and address prior to			
installation.			



Goals, Policies, and Implementation Actions



# **Greenhouse Gas Reduction Sub-Element**

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



#### B. Greenhouse Gas Reduction Targets

Under HB 1181, cities and counties that are required to prepare Climate Elements as part of their Comprehensive Plans must include a sub-element on greenhouse gas (GHG) emissions reduction. The City of Tumwater's **GHG Reduction Sub-Element dictates the** City's approach to eliminating GHG emissions towards achieving net-zero emissions by 2045. The City 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 the city of Tumwater, including but not limited to residential, commercial, and transportation sectors).

#### **Municipal GHG Emissions Targets**

- Reduce municipal emissions by 50% from 2023 levels by 2030.
- Achieve net-zero municipal emissions by 2045.

#### **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.

The goals and policies identified in Section C (Greenhouse Gas Reduction Goals) 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.

#### C. Greenhouse Gas Reduction 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.

Greenhouse gas (GHG) 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 the City's municipal and community-wide GHG emissions. Community members expressed support for energy efficiency measures to provide financial benefits, particularly for renters and low-income residents.



Policies and Implementation Actions	Lead	Perio	d Notes
CL-4.1 Reduce energy use across building types			
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	
CL-4.1.2 Partner with public, private, non- profit, and faith-based organizations to construct and highlight high- profile demonstration buildings that use innovative energy efficiency and/or technology to limit energy use.	CDD, WRS	Start: 2026 Ongoing	
CL-4.1.3 Establish policies and programs to lower costs and pollution from fossil fuel consumption by incentivizing green building standards (i.e., building frameworks that are environmentally responsible and resource-efficient). (see CL. 5.2, 5.3, 5.4).	CDD, WRS	Start: 2026 Ongoing	
CL-4.1.4 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: 2026 Ongoing	
CL-4.1.5 Partner with Puget Sound Energy (PSE) 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 b	uildings.		
CL-4.2.1 Require energy performance ratings and disclosures for dwelling units at times of listing for sale so that prospective buyers are informed before making purchasing decisions.	CDD, WRS	Start: 2026 Ongoing	



Policies and Implementation Actions	Lead	Perio	d Notes
CL-4.2.2 Require energy performance ratings and disclosures for rental dwelling units at times of application so that tenants are informed before making rental decisions.	CDD, WRS	Start: 2027 Complete: est. 1-5 years	
CL-4.2.3 Provide education and outreach to prospective home buyers and renters to ensure that incentives for energy efficiency upgrades are readily available to them, with focus on low-to middle-income earners.	CDD, WRS	Start: 2026 Ongoing	
CL-4.2.4 Develop and adopt policies that require existing dwelling units undertake an energy audit during a substantial remodel.8	CDD, WRS	Start: 2029 Ongoing	
CL-4.2.5 Provide incentives for property owners who take part in energy efficiency programs such as property tax breaks for installing energy conservation measures in rental housing.	CDD, EXD, FIN, WRS	Start: 2025 Complete: est. 1-5 years	
CL-4.2.6 Require baseline levels of energy efficiency as part of building permit review.	CDD	Start: 2029 Ongoing	Brought up by community members to benefit renters and low-income residents.

<sup>&</sup>lt;sup>8</sup> "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).





CL-4.3 Reduce energy use in existing nonresident	ial buildings.		
CL-4.3.1 Require energy performance ratings for nonresidential buildings be disclosed 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.  CL-4.3.2 Continue to install LED lighting in	CDD, WRS	Start: 2027 Complete: est. 1-5 years	
City buildings and infrastructure as funding becomes available.		Complete: est. 1-2 years	
CL-4.3.3 Create an incentive program for the installation of cool roofs <sup>9</sup> and living walls on nonresidential buildings to reduce energy consumption and the urban heat island effect.	CDD, WRS	Start: 2027 Ongoing	
CL-4.3.4 Set energy efficiency performance standards for existing nonresidential buildings with gross floor areas smaller than 20,000 square feet which are not yet covered under the state Department of Commerce's Clean Building Performance Standards.	CDD & WRS	Start: 2028 Ongoing	
CL-4.4 Reduce energy use in new construction, re	development,	and deconstru	uction.
CL-4.4.1 Incentivize projects that meet green building or 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	

 $<sup>^{9}</sup>$  Roofs designed to reflect more sunlight, thus lowering building temperatures.





CL-4.4.3 Explore developing guidelines for deconstruction and salvaging materials for reuse.	CDD	Start: 2026 Complete: est. 5 years	
CL-4.5 Convert to alternative fuel sources.			
CL-4.5.1 Educate community members on options for electric appliances and the benefits of pairing electrification with the installation of renewable energy. Create incentives to support	WRS	Start: 2025 Ongoing	
fuel switching.			

**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 and Implementation Actions	Lead	Period	Notes
CL-5.1 Increase the production of local renewable	e energy.		
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 Support and implement local development code amendments that require solar-ready construction for all building types.	CDD	Start: 2025 Complete: est. 1-5 years	
CL-5.1.3 Pursue public-private partnerships to seek funding sources to accelerate clean energy projects.	WRS	Start: 2025 Complete: est. 5-10 years	





Policies and Implementation Actions	Lead	Period	Notes
CL-5.1.4 Support existing community solar	WRS	<b>Start:</b> 2025	
initiatives from Olympia Community		Complete:	
Solar and PSE by providing		est. 1-5	
educational resources, promoting		years	
programs, and identifying			
opportunities for Tumwater			
residents to participate.			

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

Transportation is the second largest source of GHG 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 the city 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 and Implementation Actions	Lead	Period	Notes
CL-6.1 Promote increased use of active forms of t nonmotorized options.	ravel such as b	icycling, walki	ing, and other
CL-6.1.1 Coordinate with the bike and pedestrian plans of the and other cities 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	Many people want to bike or walk more but feel unsafe due to lack of bike lanes or sidewalks.
CL-6.1.2 Promote biking, walking, and rolling by investing in accessible and attractive street-level elements per goals included in the Transportation Plan like seating, shaded sidewalks, ADA ramps, enhanced signals and crossings, and protected bike lanes.	TED, CDD	Start: 2025 Complete: est. 1-5 years	<u>&amp;</u> &





Policies and Implementation Actions	Lead	Period	Notes
CL-6.1.3 Develop 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 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	<u>&amp; &amp;</u>
CL-6.1.5 Reevaluate long term plans, such as the Transportation Plan and Capital Facilities Plan, and update to prioritize non-motorized transportation. Set goals and plans for shifting to non- motorized transportation, like developing carfree corridors in commercial and mixed-use areas to encourage mode shift.	TED	Start: 2025, Complete: est. 3 years	88
CL-6.2 Increase adoption of electric vehicles (EVs)		ı	
CL-6.2.1 Partner 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 Provide educational resources for community members seeking to install EV chargers at home, with specific incentive support for smaller-scale and multi-family property owners.	WRS, CDD	Start: 2025 Complete: est. 1-5 years	<u>&amp; &amp;</u>
CL-6.2.3 Explore more opportunities to expand the city's publicly available EV charging network.	WRS, TED, PRFD	Ongoing	<u>&amp; &amp;</u>





**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 throughout and beyond Tumwater.

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 the city's GHG 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, or VMT, which in turn lead to reduced emissions, air pollution, and traffic congestion.

Policies and Implementation Actions	Lead	Period	Notes
CL-7.1 Continue land use policies that suppo	rt increased urban (	density and ef	ficient transportation
networks and reduce urban sprawl.			
CL-7.1.1 Develop and implement a strategy for eliminating parking minimums and establishing parking maximums, in alignment with statewide requirements.	CDD	Start: 2025 Complete: est. 1-5 years	
CL-7.1.2 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	Interest in increased transit to centralized commercial hubs.
CL-7.1.3 Collaborate with City departments to increase the number of 15-minute neighborhoods (i.e., walkable environment, destinations that support a range of basic living needs and a residential density), in coordination with goals outlined in the Land Use Element. Help identify key infrastructure components needed to increase the number of 15-minute neighborhoods, prioritizing low- and middle-	CDD	Ongoing Complete: est. 5 years	<u>&amp; &amp;</u>





Policies and Implementation Actions	Lead	Period	Notes
income residents, then change zoning and codes if needed and coordinate with other cities to make public investments where necessary.			
CL-7.2 Increase efficiency of the transportation	on system.		
CL-7.2.1 As part of the Transportation Plan, fund programs and projects to increase transportation efficiency, reduce delay, and reduce emissions. Examples include traffic signal timing improvements, reevaluating speed limits, deploying roundabouts vs. signalized intersections, promoting street connectivity, and other traffic flow control tools.	TED	Ongoing	Added benefits are decreased pollution due to idling and improved fuel efficiency leading to cost savings.
CL-7.2.2 Develop educational campaigns and programs about benefits of properly inflated tires, including signage at gas stations and local businesses and partnering with schools.	TED, WRS, Stream Team	Start: 2025 Complete: est. <1 year	Benefits of proper tire inflation include reduced GHG emissions, increased fuel efficiency, safety, salmon recovery, etc.
CL-7.2.3 Work with Intercity Transit to increase local public transit routes or frequency with a focus on ensuring the greatest number of riders have access to a low-carbon transportation option. Any expansion of service should include an analysis of climate impacts to ensure the program does not result in an increase in greenhouse gas emissions.	CDD, TED	Start: 2025 Complete: est. 1-5 years	
CL-7.2.4 Work with Intercity Transit to identify and implement programs that help people move to and from transit,	CDD, TED	Start: 2025 Complete: est. 1-5 years	<u>&amp; &amp;</u>

Goals, Policies, and Implementation Actions



Policies and Implementation Actions	Lead	Period	Notes
reduce GHG emissions, and use			
street-level improvements to			
connect neighborhoods			
without the population to			
support fixed routes transit			
options. Tumwater will engage			
homeowners' associations for			
representation and feedback.			
Expansion of service will			
include an analysis of climate			
impacts to ensure the program			
does not result in an increase in			
GHG 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.

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, pollutions, and reduce urban heat. Community members have expressed strong support of preserving the tree canopy in Tumwater.

Poli	cies and Implementation Actions	Lead	Period	Notes
CL-8.1	Preserve tree canopy and support habita	t restoration a	and conservati	on to sequester
CL-8	carbon.  3.1.1 Adopt 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 overburdened communities.	WRS	Start: 2026 Complete: est. 1-5 years	8 8 A





Delicies and Implementation Actions	Lood	Doriod	Notes
Policies and Implementation Actions	Lead	Period	Notes
CL-8.1.2 Establish goals for preserving existing	WRS	<b>Start:</b> 2025	
mature tree canopy in alignment		Complete:	
with TMC 16.08 . Include guidelines		est. >1 year	
and incentives for maintaining larger, more established trees.			
CL-8.1.3 Support implementation of habitat	CDD	Ongoing	
conservation plans (HCPs) that allow	CDD	Oligoling	
for state required development and			
provide for preservation and			
restoration of prairie habitat for			
endangered and threatened prairie			
species.			
CL-8.1.4 Continue to champion statewide	CDD	Ongoing	
conservation efforts to protect,			
restore, and manage wetlands and			
riparian habitat.			
CL-8.1.5 Build relationships and capacity	WRS	Ongoing	
among regional partners to ensure			
successful and effective data			
coordination and program alignment.			
CL-8.1.6 Maximize tree canopy coverage in	WRS, CDD	<b>Start:</b> 2025	
surface parking lots. Establish an	VVII.3, CDD	Complete:	
initiative for identifying impervious		est. 1-5	
surfaces across parking lots for		years	
potential reforestation or			
conversion.			

Goals, Policies, and Implementation Actions



### Resilience Sub-Element

This sub-element contains eight goals that aim to help the City of 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 the City's work on Climate Adaptation.



#### D. Climate Resilience Goals

Goal CL-9 Ensure that buildings and energy infrastructure can accommodate renewable energy opportunities, keep the community safe, and can 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 and Implementation Actions	Lead	Period	Notes
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	<b>Start:</b> 2028	
CL-9.1.1 Identify potential funding sources to bury existing power lines and associated infrastructure, or to make more resilient to climate impacts where burial is not feasible.	CDD, TED, WRS	Start: 2028 Complete: Ongoing	
CL-9.1.2 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	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
CL-9.1.3 Review existing and planned capital facilities to ensure they will be able to function as intended over their planned life cycle, creating and implementing plans to strengthen any capital facilities with identified vulnerabilities.	TED, PRFD, WRS	Start: 2028 Complete: Ongoing	





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Policies and Implementation Actions	Lead	Period	Notes
CL-9.2 Plan energy infrastructure to be able to	CDD, WRS,	<b>Start:</b> 2026	
integrate with an increase in	Fire and		
renewable energy sources, including	EMS		
increasing energy storage capacity to improve energy grid resilience.			
CL-9.2.1 Identify key public facilities that	CDD, TED,	<b>Start</b> : 2026	
must remain operational during a	PRFD, WRS,	Complete:	
·	· · · · · ·	-	
·		cst. <1 year	
·		Start: 2027	
•			
	111.0, 022	-	
		,	
·	TED, PRFD,	Start: 2030	
energy generation and battery	WRS, CDD	Complete:	
storage infrastructure at identified		est. 5-10	
key public facilities to ensure		years	
continuity of operations for a			
minimum of 24 hours.			
CL-9.3 Require buildings in high-risk areas <sup>10</sup> to	CDD	<b>Start:</b> 2028	
	CDD		_
		-	
_			revised WUI map.
·		years	
	CDD W/DC	Ctart: 2022	
•	CDD, WKS		
		Oligoling	
hazard event that impacts power availability.  CL-9.2.2 Identify 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.  CL-9.2.3 Install locally distributed renewable energy generation and battery storage infrastructure at identified key public facilities to ensure continuity of operations for a minimum of 24 hours.	Fire and EMS TED, PRFD, WRS, CDD TED, PRFD, WRS, CDD	est. <1 year  Start: 2027 Complete: est. 2-3 years  Start: 2030 Complete: est. 5-10 years	Period contingent on release of revised WUI map.

<sup>&</sup>lt;sup>10</sup> High risk areas to be identified by the City'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.



			TOMWATER
Policies and Implementation Actions	Lead	Period	Notes
CL-9.3.3 Develop and maintain a fund to subsidize 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-9.3.4 Amend Tumwater building code to require that all residential development and redevelopment projects be appropriately weatherized and built to be livable and comfortable during extreme weather events. Requirements may include installing heat pumps or air conditioning units if it cannot be proved the building is built for passive survivability. <sup>11</sup>	CDD, WRS	Start: 2030 Complete: est. 10 years	
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	<b>Start</b> : 2028	
CL-9.4.1 Develop Climate Resilience Guidelines demonstrating how to design buildings for passive survivability, <sup>7</sup> 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: 2028 Complete: est. 5 years	
CL-9.4.2 Secure and maintain funding for an incentive program for retrofit of existing buildings to meet established Climate Resilience Standards.	CDD, WRS	Start: 2033 Ongoing	

<sup>&</sup>lt;sup>11</sup> See Part 2: Technical Information for more information on heat projections, passive survivability, and building code.

Goals, Policies, and Implementation Actions



Delicies and local accountation Astions	Local	Daviad	Notes
Policies and Implementation Actions	Lead	Period	Notes
CL-9.4.3 Develop and maintain a rebate	WRS	<b>Start:</b> 2028	88 50
program for low-income residents		Complete:	A
who do not qualify for		Ongoing	
weatherization assistance through			
the Community Action Council or			
whose dwellings are considered vulnerable, such as manufactured			
homes, to weatherize their homes			
against extreme weather.			
CL-9.5 Work with energy utilities to improve	WRS, Puget	<b>Start:</b> 2025	
the safety and reliability of	Sound	<b>Start.</b> 2023	
infrastructure vulnerable to climate	Energy, CDD		
change.	Lifeigy, CDD		
CL-9.5.1 Establish partnerships with all	WRS, Puget	<b>Start:</b> 2025	
regional energy utilities and develop	Sound	Complete:	
short- and long-range plans to	Energy	est. 3-5	
assess and mitigate the risk of		years	
climate hazard impacts on energy			
generation and transmission			
infrastructure.			
CL-9.5.2 In partnership with local energy	WRS, Puget	Start: 2026	
utilities, explore large-scale energy	Sound	Complete:	
storage options to use in Tumwater	Energy,	est. 3 years	
as part of a transition to reliable	CDD, Fire		
renewable energy.	and EMS		

### 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 and Implementatio	n Actions	Lead	Period	Notes
CL-10.1 Improve community outre	each on and	WRS & ED	<b>Start:</b> 2025	
response capabilities for c	limate health			
and hazard issues, prioriti	zing frontline			
communities to address e	conomic,			
social, and health disparit	ies.			



Delicies and Implementation Actions	Lood	Davied	Notes
Policies and Implementation Actions  CL-10.1.1 Partner with a philanthropic organization or 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	Lead WRS, Fire and EMS, County	Period Start: 2025 Complete: est. 1 year	Notes
members.  CL-10.1.2 Transition management of the vulnerable population database to the City and secure long-term funding and staffing to keep the database up to date and oversee its use during emergencies.	WRS, Fire and EMS, County	Start: 2028 Complete: est. 1-2 years	8 8 P
CL-10.1.3 Develop and adopt a Pre-Event Recovery Ordinance using American Planning Association's guidance that will allow the City to establish a Local Recovery Management Organization (LRMO) 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, County, Fire & EMS	Start: 2026 Complete: < 1 year	
CL-10.1.4 Develop climate-resilient redevelopment guidelines to help guide disaster recovery decisions. Utilize recommendations from FEMA's Pre-Disaster Recovery Planning Guide for Local Governments.	CDD, EXD, Fire and EMS, LRMO	Start: 2030 Complete: est. 1-5 years	



Policies and Implementation Actions	Lead	Period	Notes
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-10.2 Develop resources to mitigate the risks posed by extreme heat.	City	<b>Start:</b> 2025	
CL-10.2.1 Implement the Thurston County Extreme Heat, Emergency Response, and Illness Prevention Plan.	WRS, County, Fire and EMS	<b>Start</b> : 2026	
CL-10.2.2 Preserve and expand tree and shade cover to reach the 2040 goal of 39% recommended in the UFMP to reduce urban heat.	WRS	Start: 2027 Complete: est. 10-15 years	
CL-10.2.3 Assess potential partnerships with CBOs and regional agencies that can serve as resilience hubs that provide resources such as heat pumps and emergency supplies for community members to check out during emergencies.	WRS, Fire and EMS, Community- Based Organizatio ns, County	Start: 2026 Complete: est. 3-5 years	88
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: 2025 Complete: est. 1-2 years	& & & & & & & & & & & & & & & & & & &
CL-10.3 Increase regional wildfire resilience, preparedness, and response	WRS, Fire and	<b>Start:</b> 2025	
capabilities in Tumwater.	EMS		
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	Later expected start due to uncertainty around WUI mapping





Policies and Implementation Actions	Lead	Period	Notes
CL-10.3.2 Collaborate with emergency	WRS,	<b>Start:</b> 2030	Longer expected
managers and fire experts to	Fire and	Complete:	period due to
educate and empower homeowners	EMS,	est. 5-7	uncertainty around
to make changes to their homes and	Thurston	years	WUI mapping
properties that lower their wildfire	Conservatio		
risk, encouraging measures that do	n District		
not decrease canopy cover where			
possible. Enroll 75% of residents in			
wildfire risk areas in the Wildfire			
Ready Neighbors program.			
CL-10.3.3 Incentivize communities and	CDD,	<b>Start:</b> 2030	Longer expected
homeowners in the WUI to invest in	Fire and	Complete:	period due to
wildfire hardening and mitigation	EMS	est. 5-7	uncertainty around
strategies to protect their homes		years	WUI mapping
and properties, encouraging			
measures that do not decrease			
canopy cover where possible.			
Mitigate wildfire risk for at least			
60% of homes.			
CL-10.3.4 Secure funding to provide grants	CDD,	<b>Start:</b> 2030	
to low-income community members	Fire and	Complete:	
to follow recommended changes to	EMS	est. 2 years	
their homes and properties to lower			
their wildfire risk.	MAC	61-1-2025	
CL-10.3.5 Provide educational resources to	WRS,	Start: 2025	
aid community members in	Fire and	Complete:	
developing personal wildfire	EMS	est. 2 years	
evacuation plans, prioritizing residents in the WUI.			
CL-10.4 Collaborate with regional partners to	WRS	<b>Start</b> : 2026	
develop resources that address	VVNS	<b>Start.</b> 2020	
projected increases in risks and impacts			
associated with climate change.			
CL-10.4.1 Develop and share guidance for	WRS, Fire	<b>Start:</b> 2026	
navigating post-disaster mental	and EMS	Complete:	
health and social resources,		< 2 years	
translated into multiple languages.		Í	





Policies and Implementation Actions	Lead	Period	Notes
CL-10.4.2 Coordinate with the County and LeMay Pacific Disposal to develop an emergency waste management plan that includes contingencies for waste pickup schedules in the event of flooding predictions or other hazards that can be mitigated in advance.	City & LeMay Pacific Disposal Thurston County	Start: 2030 Complete: est. 5 years	Notes
CL-10.4.3 Develop and implement a regional wildfire and smoke resilience and response strategy.	WRS, Fire and EMS, ORCAA	Start: 2025 Complete: est. 5-7 years	
CL-10.4.4 Develop a protocol for using the County emergency alert system to issue 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, ORCAA, County	Start: 2027 Complete: est. 3-5 years	
CL-10.5 Improve community resilience, health equity, and environmental justice by ensuring 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	<b>Start:</b> 2027	& & & & & & & & & & & & & & & & & & &
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: 2027 Complete: est. 1-2 years	<u>&amp; &amp;</u>
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: 2030 Complete: est. 1-5 years	<u>8</u> 8



Policies and Implementation Actions	Lead	Period	Notes
CL-10.5.3 Obtain funding to finish the Deschutes Valley Trail, aiming to complete construction by 2040.	TED, WRS, PRFD	Start: 2028 Complete: est. 10 years	
CL-10.6 Position the city to qualify for more funding opportunities to adapt to climate impacts.	WRS	<b>Start:</b> 2028	
CL-10.6.1 Explore opportunities to partner with academic research institutions to study hazard events of all magnitudes to provide a fuller understanding of the community's hazard characteristics — including those affected by climate change.	WRS, SPSCC, Evergreen State College, St. Martins University	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 the City's Comprehensive Vulnerability Assessment into the Tumwater Annex of the Thurston County Hazard Mitigation Plan. Identify specific projects and opportunities that the City 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 to secure funding for this program.	WRS	Start: 2027 Complete: est. 3-4 years	
CL-10.7 Increase understanding of how climate change impacts vector-borne disease outbreaks. Make a plan to protect against projected increases in frequency and severity.	WRS, County Health Department	<b>Start:</b> 2027	



Policies and Implementation Actions	 Lead	 Period	Notes
CL-10.7.1 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, County Health Department	Start: 2027 Complete: est. 2 years	
CL-10.7.2 Coordinate with the County Health Department to develop strategies to mitigate projected increases in disease and pest risk.	WRS, County Health Department	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	<b>Start:</b> 2027	<u>&amp; &amp;</u>
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 from tools like EJScreen 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	8 8 A
CL-10.8.2 Establish and maintain a stable funding source to distribute personal protective equipment to populations vulnerable to poor air quality.	WRS, Thurston County Health Department , & Community Based Organizatio ns	Start: 2029 Complete: est. 1-2 years Maintain: ongoing	EAS PROPERTY OF THE PROPERTY O



Policies and Implementation Actions	Lead	Period	Notes
CL-10.8.3 Identify facilities that serve highrisk populations to create incentive programs encouraging infrastructure updates for clean indoor air. Updates should include HVAC system improvements.	WRS	Start: 2030 Complete: est. 1-5 years	8 <u>8</u>
CL-10.9 Ensure community members have resources to shelter in place or to adequately reach temporary shelter.	WRS	<b>Start:</b> 2025	& & & & & & & & & & & & & & & & & & &
CL-10.9.1 Coordinate with other agencies and jurisdictions to provide more cooling centers 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 the city, with priority for opening locations near the highest concentrations of heat-vulnerable residents.	WRS, County Health Department	Start: 2025 Complete: est. 5-10 years	88
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, County Health Department	Start: 2025 Complete: est. 5-10 years	8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
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, WRS	Start: 2025 Complete: est. <1 year	
CL-10.10 Increase language accessibility of emergency services, plans, and resources.	ASD, CDD, WRS	<b>Start:</b> 2025	<u>&amp; &amp;</u>
CL-10.10.1 Establish on-call contracts for language interpretation and translation services, including ASL.	ASD, CDD, WRS	Start: 2025 Complete: est. <1 year	<u>&amp; &amp;</u>





Policies and Implementation Actions	Lead	Period	Notes
CL-10.10.2 Utilize on-call contracts for language services to translate all emergency resources and plans.	ASD, CDD, WRS	Ongoing upon adoption of relevant	<u>&amp; &amp;</u>
		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.

Tumwater is built on land traditionally stewarded by the Coast Salish people. Their descendants in the Nisqually, Squaxin Island, and Chehalis 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 and Implementation Actions	Lead	Period	Notes
CL-11.1 Enhance partnership between the Tribes and the City, integrating Tribal expertise, opinions, and values into climate planning efforts, projects, and programs.	ED, WRS, Tribes	<b>Start:</b> 2025	<u>&amp; &amp;</u>
CL-11.1.1 In collaboration with the Tribes, establish guidelines and standards for incorporating Traditional Ecological Knowledge into City programs and planning efforts to adapt to climate change impacts.	WRS, Tribes	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, Tribes	Start: 2030 Complete: est. 5 years	8 8 ES
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, Tribes	<b>Start:</b> 2025	8 8 A

Goals, Policies, and Implementation Actions



Policies and Implementation Actions	Lead	Period	Notes
CL-11.2.1 Work with local partners, especially representatives of the Tribes, to establish and sustain a native plant nursery and seed bank to support long-term ecological restoration and ensure continued access to culturally significant plants.	WRS, Tribes	Start: 2026 Complete: est. 4 years	<u>&amp; &amp;</u>
CL-11.2.2 In collaboration with the Tribes, identify consumptive and non-consumptive resources that will be adversely impacted by climate change.	WRS, Tribes	Start: 2025 Complete: est. 3 years	<u>&amp; &amp;</u>
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, Tribes	Start: 2028 Complete: est. 5 years	<u>&amp; &amp;</u>
CL-11.3 Collaborate with the Tribes to ensure the preservation of archaeological sites and traditional cultural properties that are vulnerable to climate impacts.	WRS, CDD, PRFD, Tribes	<b>Start:</b> 2026	<u>&amp; &amp;</u>
CL-11.3.1 Request recommendations from the Tribes for actions the City can take to preserve historic sites and cultural properties.	WRS, PRFD, Tribes, DAHP	Start: 2026 Complete: est. 3 years	<u>&amp; &amp;</u>
CL-11.3.2 In collaboration with the Tribes, develop guidelines for protecting, enhancing, and restoring affected historic sites and cultural properties.	WRS, Tribes	Start: 2029 Complete: est. 5 years	<u>&amp; &amp;</u>

## 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 ensure vital native species are able to survive and thrive in the coming decades, while also continuing to provide key ecosystem services to Tumwater's human residents.





Policies and Implementation Actions	Lead	Period	Notes
CL-12.1 Manage Tumwater's urban forest in line with the most recent UFMP and current climate projections and guidance.	City	<b>Start:</b> 2025	
CL-12.1.1 Enact the updated Tree Ordinance.	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	<u>&amp; &amp;</u>
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	WRS	Start: 2027 Reassess every 5 years	
relevant emergent information.  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 nonnative, 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	Start: 2027 Complete: est. 5-7 years	
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	



Policies and Implementation Actions	Lead	Period	Notes
CL-12.2 Protect, restore, and connect streams, riparian zones, estuaries, wetlands, and floodplains to increase resiliency to climate change and reduce flood risk.	WRS, CDD	<b>Start:</b> 2028	110100
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: 2028 Complete: est. 3 years	
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: 2031 Complete: est. 8 years	
CL-12.2.3 Protect and restore riparian vegetation to reduce erosion, provide shade, and support other functions that improve the climate resilience of streams.	WRS, CDD	Start: 2031 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 riparian habitat without causing any adverse impacts to Oregon Spotted Frog habitat.	WRS	Start: 2028 Complete: est. 2 years	
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	<b>Start:</b> 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	Notes
CL-12.3.2 Develop an Ecosystem Restoration Plan or a Natural Resource Management Plan and adopt 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	Use National Fish, Wildlife and Plants Climate Adaptation Strategy
CL-12.3.3 Locate funding to 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	<b>Start:</b> 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 Complete: est. 2 years	
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	<b>Start:</b> 2025	
CL-12.5.1 Identify programs that will have a substantive impact on fish and wildlife habitat.	WRS	Start: 2025 Complete: est. 3 years	





Policies and Implementation Actions	 Lead	Period	Notes
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	WRS, TED, PRFD, CDD	Start: 2028 Ongoing	
incorporate positive impacts.  CL-12.6 Take early action to eliminate or control non-native invasive species, including insects and plants that take	WRS	<b>Start:</b> 2026	
advantage of climate change, especially where invasives threaten native species or ecosystem function.			
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 Partner 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	

## Goal CL-13 Ensure that zoning and development decisions support compact urban development, prevent displacement, and foster system-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 ensure equity in decision-making.





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Policies and Implementation Actions	Lead	Period	Notes
CL-13.1 Develop anti-displacement programs in overburdened communities when increasing densities.	CDD, WRS	<b>Start:</b> 2025	<u>&amp; &amp;</u>
CL-13.1.1 Review existing anti-displacement and equity decision-making tools and use these to develop guidance specific to Tumwater for future housing and zoning decisions.	CDD, WRS	Start: 2025 Complete: est. 2 years	<u>&amp; &amp;</u>
CL-13.1.2 Conduct extensive outreach activities in frontline communities at risk of displacement to collaboratively develop a set of antidisplacement strategies.	CDD, WRS	Start: 2027 Complete: est. 3 years	<u>&amp; &amp;</u>
CL-13.1.3 Review land use maps and Comprehensive Vulnerability Assessment findings to identify regions at high-risk of disaster displacement such as barriers to rebuilding housing in high-risk areas and develop strategies in collaboration with impacted communities to develop solutions.	CDD, WRS	Start: 2028 Complete: est. 5 years	<u>&amp; &amp;</u>
CL-13.2 Form a working group to secure Tumwater's economic resilience.	EXD, WRS	<b>Start:</b> 2025	
CL-13.2.1 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 projected economic impacts on Tumwater.	EXD, WRS, Chambers of Commerce, EDC	Start: 2027 Complete: est. 2 years	
CL-13.2.2 Provide resources to the local Economic Resilience Working Group to inform the development of an economic resilience component of the Economic Development Plan.	EXD, WRS	Start: 2029 Complete: est. 1-2 years	





Policies and Implementation Actions	Lead	Period	Notes
CL-13.2.3 Coordinate with partners to incorporate continuity of operations thinking into the County's Comprehensive Emergency Management Plan.	EXD, WRS, Economic Resilience Working Group, County	Start: 2029 Complete: est. 4 years	
CL-13.2.4 Form partnerships with organizations that aid workers affected by climate change who are transitioning to new fields of employment to share their services with Tumwater community members.	EXD, WRS	Start: 2025 Complete: est. 7 years	& & & & & & & & & & & & & & & & & & &
CL-13.3 Embed environmental justice in City land use decisions.	CDD, WRS	<b>Start</b> : 2025	<b>88 8</b>
CL-13.3.1 Develop an Environmental Justice Audit process, using the State Department of Ecology guidance as well as US EPA guidance to inform Tumwater's audit process.	CDD, WRS	Start: 2025 Complete: 3 years	8 8 A
CL-13.3.2 Conduct a city-wide environmental justice audit prior to amending land use designations.	WRS & CDD	Start: 2028 Ongoing as needed	& & A
CL-13.4 Restore and maintain critical areas, non-regulated open space areas, and the floodplain to maximize climate resilience and ecosystem benefits.	WRS	<b>Start:</b> 2026	
CL-13.4.1 Inventory existing and projected vulnerabilities of critical areas, open spaces, and floodplain-adjacent parcels.	WRS	Start: 2026 Complete: est. 2 years	
CL-13.4.2 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 graygreen infrastructure that will enhance natural systems into recommended actions.	WRS & TED	Start: 2028 Complete: 3 years	





Policies and Implementation Actions	Lead	Period	Notes
CL-13.4.3 When new State best available science is issued, update critical areas ordinances.	CDD	Ongoing	
CL-13.4.4 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, FEMA	Start: 2026 Complete: est. 6 years	
CL-13.4.5 Review best available science for buffers and setbacks for steep slopes vulnerable to erosion exacerbated by climate change, and establish new minimums, if necessary, so that improvements are not required to protect structures during their expected life.	CDD	Start: 2026 Reassess every 2 years	
CL-13.5 Identify and implement strategies for reducing residential development pressure in the wildland-urban interface.	CDD	<b>Start:</b> 2030	
CL-13.5.1 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	Longer expected period due to uncertainty around WUI mapping
CL-13.5.2 Establish incentives and regulations to maintain open space buffers to reduce wildfire risk.	WRS, CDD	Start: 2030 Complete: est. 3-5 years	
CL-13.6 Encourage the location of new development in areas where exposure to climate hazards is low and ecological impacts are minimized.	CDD	<b>Start</b> : 2025	
CL-13.6.1 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	





Policies and Implementation Actions	Load —	Pariod	Notes -
Policies and Implementation Actions  CL-13.6.2 Update the regional Transfer of Development Rights program to meet state-mandated growth requirements while preventing urban sprawl and protecting key ecosystems.  CL-13.6.3 Develop hazard-specific overlay zones and create design guidelines, codes, and guidebooks that will lead	Lead County, CDD WRS, CDD, TED	Period Start: 2028 Complete: est. 1-2 years  Start: 2028 Complete: est. 10	Notes
to climate resilient development.  CL-13.6.4 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	years  Start: 2025 Reassess every 5 years	
CL-13.7 Support local businesses' efforts to bolster climate preparedness and continuity of operations.	EXD, WRS	<b>Start:</b> 2035	
CL-13.7.1 In partnership key stakeholders, draft recommendations for new building codes and incentive programs that help installation of on-site renewable energy and battery storage.	EXD, Chambers of Commerce, Thurston EDC, Economic Resilience Working Group	Start: 2035 Complete: est. 3 years	
CL-13.8 In areas with significant vulnerability to climate hazards, facilitate and support long-term community visioning including consideration of managed retreat.	CDD, WRS	<b>Start:</b> 2026	
CL-13.8.1 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	





Policies and Implementation Actions	Lead	Period	Notes
CL-13.8.2 Conduct regular outreach activities with identified high-risk communities and other key stakeholders (Transportation,	CDD, WRS	Start: 2028 Ongoing	
developers, etc.) to educate them on risks.			
CL-13.8.3 Review adaptation plans for communities in other cities and neighborhoods facing similar risks.	CDD, WRS	Start: 2026 Complete: est. 1 year	
CL-13.8.4 Establish long term action plans with at-risk communities, with distinct phases for different increasing levels of risk.	CDD, WRS	Start: 2027 Complete: est. 3-5 years	

# Goal CL-14 Ensure that the local transportation system, including infrastructure, routes, and non-motorized travel modes, 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 the City, it is important to address the intersection of Transportation planning and climate resilience.

Policies and Implementation Actions	Lead	Period	Notes
CL-14.1 Improve street connectivity, transit accessibility, and walkability, including sidewalks and street crossings, to ease emergency evacuation.	TED	<b>Start:</b> 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	
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	

Goals, Policies, and Implementation Actions



Policies and Implementation Actions	Lead	Period	Notes
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 established by CL-10.1.2.	Intercity Transit, Fire and EMS	Start: 2029 Complete: est. 8 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. WSDOT	<b>Start:</b> 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, WSDOT	Start: 2028 Ongoing	
CL-14.4 Facilitate quick recovery of the whole multimodal transportation system after disruption from disasters or extreme weather events.	TED	<b>Start</b> : 2028	
CL-14.4.1 Develop transportation recovery plans that ensure recovery of one aspect of the transportation system does not inhibit recovery of other forms of transportation. 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, Intercity Transit	Ongoing	

## 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 and Implementation Actions	Lead	Period	Notes
CL-15.1 Manage Tumwater's water sustainably, ensuring there is adequate quantity and quality of water available for future generations.	WRS	<b>Start:</b> 2025	
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)	
of water delivery infrastructure to ensure that changes in hydrological patterns can be anticipated and managed effectively. 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 for any projected climate impacts, including saltwater intrusion, contamination, and reduced quantities. If necessary, develop and implement strategies to mitigate impacts.	WRS	Start: 2028 Complete: est. 4-5 years	
CL-15.2 Improve the City's drought resilience through water reclamation and conservation measures, drought-tolerant landscape design, and advocacy.	WRS, CDD	<b>Start:</b> 2025	

Goals, Policies, and Implementation Actions



Policies and Implementation Actions	Lead	Period	Notes
CL-15.2.1 Expand use of reclaimed water at City facilities when resources are	WRS	Start: 2026 Reassess	
available and expand municipal		every 2	
reclaimed water systems.		years	
CL-15.2.2 Allow onsite non-potable water	WRS	<b>Start:</b> 2025	
systems such as rain cisterns to		Complete:	
reduce water demand in private-		est. 4-6	
sector commercial and residential		years	
buildings.			
CL-15.2.3 Promote rain gardens, dormant	WRS	<b>Start:</b> 2025	500
lawns and lawn alternatives, as well		Ongoing	
as native and drought-tolerant			
landscaping choices. Secure funding to establish an incentive or rebate			
program for community members			
who use native and drought-tolerant			
landscaping options.			
CL-15.2.4 Establish a demonstration area for	WRS &	<b>Start:</b> 2026	
lawn alternatives that highlights	Parks,	Complete:	
native and drought-tolerant	Recreation,	est. 1 year	
landscaping.	& Facilities		
	Department		
CL-15.2.5 Lobby at the county health	WRS	<b>Start:</b> 2025	7(1)
department and state level agencies		Ongoing	
for the reuse of greywater on-site in			
buildings for flushing toilets,			
irrigation.	NA/DC	61-1-2025	
CL-15.2.6 Lobby at state level to prioritize	WRS	<b>Start:</b> 2025	(T())
using water resources in alignment with public interests.		Ongoing	
CL-15.3 Develop and implement a	WRS	<b>Start:</b> 2026	
comprehensive drought resilience		Jul 11 2020	
strategy that factors in projected			
climate impacts and sets action levels			
for different drought stages.			
CL-15.3.1 Conduct outreach to understand	WRS	<b>Start:</b> 2026	
current water resource needs (i.e.		Complete:	
water-reliant livelihoods).		est. 1 year	





Policies and Implementation Actions	 Lead	Period	Notes
CL-15.3.2 Draft measures to ensure low- income residents and residents whose income relies on water availability continue to receive water at a fair rate.	WRS	Start: 2027 Complete: est. 2 years	
CL-15.4 Increase use of Low-Impact Development (LID) infrastructure projects that help capture, filter, store, and reuse stormwater runoff.	WRS	<b>Start:</b> 2025	
CL-15.4.1 Continue to prioritize funding for LID 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 LID best management practices with developers to use in future projects.	WRS	Start: 2025 Ongoing	
CL-15.5 Assess current and projected future water demand and water storage.	WRS	<b>Start:</b> 2030	
CL-15.5.1 Evaluate current water storage capacity against projected water availability and population growth to discover whether additional storage is required.	WRS	Start: 2030 Complete: est. 2 years	
CL-15.5.2 Identify preferred methods and sites for more water storage through community outreach and a comprehensive review of water storage options.	WRS	Start: 2032 Complete: est. 3 years	
CL-15.5.3 Construct and maintain new water-storage systems as needed.	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, the City can address waste reduction goals by shifting food waste into composting waste streams.

Policies and Implementation Actions	Lead	Period	Notes
CL-16.1 Improve local food justice through collaboration, education, and advocacy.	WRS	<b>Start:</b> 2025	
CL-16.1.1 Implement the Food System Plan, updating it periodically as necessary.	CDD, WRS	Start: 2025 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	<u>&amp; &amp;</u>
CL-16.1.3 Establish 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	
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	<b>Start:</b> 2026	
CL-16.2.1 Develop outreach materials to promote and educate on composting methods and systems.	WRS	Start: 2026 Complete: est. 1 year	





Policies and Implementation Actions	Lead	Period	Notes
CL-16.2.2 Develop an incentive program for	WRS	<b>Start:</b> 2031	
residents to install and utilize		Complete:	
composting systems.		1-2 years	
CL-16.3 Expand consistent access to food for	WRS	<b>Start:</b> 2025	88 5
Tumwater community members.			
CL-16.3.1 Coordinate with the County to	WRS,	<b>Start:</b> 2025	88
expand access to food bank	County	Complete:	
services.		est. 1-3	
		years	
CL-16.3.2 Conduct community outreach to	WRS	<b>Start:</b> 2026	8.8
find gaps and barriers in consistent		Complete:	<u>&amp; &amp;</u>
access to nutritious food.		est. 1 vear	



# **Technical Information**

# City of Tumwater 2025 Comprehensive Plan

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

**DRAFT VERSION December 2024** 

**Updated December 31, 2024** 

December 2024

Ordinance No. O2025-0XX







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## Acronyms and Abbreviations Used in Document

**ASD** – Administrative Services Department.

**CBO** – Community Based Organization

cca – The <u>Climate Commitment Act</u> (CCA) (Chapter 310, Laws of 2021) caps and reduces GHG 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 GHG 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 GHGs. 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

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**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.<sup>1</sup>

**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)

<sup>&</sup>lt;sup>1</sup> 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

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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<sup>2</sup>:** 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.

**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 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.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> 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

<sup>3</sup> United States Department of Agriculture, n.d. "What is a native plant?" https://www.usda.gov/peoples-garden/gardening-advice/why-native-species-matter





**Overburdened Community**<sup>4</sup>: 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. 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**<sup>5</sup>: 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.

<sup>&</sup>lt;sup>4</sup> See Note 1

<sup>&</sup>lt;sup>5</sup> See Note 1

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## 1. Introduction

## A. Background

The Climate Element is part of Tumwater's Comprehensive Plan. It was created to meet the new state Growth Management Act (Chapter 36.70A RCW) requirements laid out in HB 1181 to adapt to and mitigate the effects of a changing climate.

The objectives of this climate element are twofold. The first sub-element addresses reducing Tumwater's greenhouse gas emissions to achieve net zero goals set by the State of Washington. The second sub-element focuses on adapting to climate impacts that are already being felt across the region. This climate resilience sub element aims to address those impacts that cannot be avoided regardless of whether the City reaches its net zero goals.

The Element addresses:

#### 1. Climate Mitigation

- Building-Scale Emissions Reduction
- Transportation and VMT reduction
- Carbon Sequestration

#### 2. Climate Resilience

- Adaption strategies across 11 key sectors
  - Agriculture and Food Systems
  - Buildings & Energy
  - Cultural Resources
  - Economic Development
  - Ecosystems
  - Emergency Management
  - Health & Well-being
  - Transportation
  - Waste Management
  - Water Resources

Zoning & Development

### 3. Climate Equity

- Embedded throughout both subelements
- Addressing inequities in climate impacts and access to resources

The Growth Management Act requires that the City demonstrate that each Element in its Comprehensive Plan meets the relevant fifteen planning goals contained within the Act. The fifteen goals in turn guide the development and adoption of the City's Comprehensive Plan and development regulations.

The new Climate Element addresses the Growth Management Act goal related to Climate:

14. 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 Climate Element has specific guidelines and policies that delineate what must be covered across the two sub-elements.

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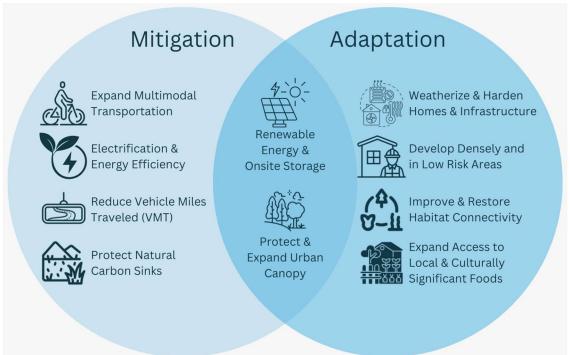
The state legislature added the Growth Management Act climate change and resiliency goal in 2023. The Climate Element is made of two sub-elements: a GHG Emissions Reduction sub-element and a Resilience sub-element. The GHG Emissions Reduction sub-element contains specific policies designed to guide the City towards Washington State's goal of net-zero by 2050. The Resilience sub-element policies direct climate adaptation measures.

This Element and implementing ordinances were developed with public input as described in the Public Outreach Plan required by the Growth Management Act. This chapter is also based on the updated list of additional supporting plans, documents, and best available science found in Appendix A.

Tumwater has a long history of pursuing sustainability goals and leading the region on

efforts like tree canopy preservation and expansion and working across jurisdictions to advance climate mitigation action. In recent years, however, it has become apparent that some climate impacts cannot be avoided. Therefore, the City must pursue climate resilience or adaptation measures as well to ensure Tumwater residents can survive and thrive while continuing to push for global climate mitigation. Resilience and mitigation actions are not discrete categories. There are several key areas of overlap across the two. For instance, preserving and expanding tree canopy cover provides both resilience and mitigation benefits. This provides shade and cooling benefits that protect residents from heat waves while sequestering carbon. When Tumwater preserves and expands tree canopy we get closer to our new goal of Net Zero by 2050.

Figure 1. Climate Mitigation and Adaptation have distinct goals, but there are many co-benefits for pursuing these actions.



Commerce requires two separate sub-elements addressing these two focus areas. At times there are actions that appear to be missing but are instead addressed in the other sub-

element. Throughout the Climate Element, policies and goals were prioritized where they provided co-benefits with environmental justice and climate equity goals.

## B. Methodology

Tumwater's Climate Element was established through a phased, multilateral process with analytical, public outreach, and regulatory inputs.

### 1. Regulatory, policy, and planning drivers

All planning and policy documents for the region that addressed any aspect of climate mitigation or resilience were gathered and reviewed for relevance to the development of the Climate Element. The documents that were determined to be the most relevant based on recency, policy robustness and focus on climate mitigation or resilience, were reviewed more thoroughly. Through this review, the City identified what Tumwater and the region have accomplished and what gaps remain. The details of this policy gap analysis, including the documents reviewed and breakdown of policies by sector and focus area can be found in Appendix A.

## 2. Climate Policy Advisory Team

Commerce issued guidance that suggests jurisdictions should create an interdisciplinary group of planners, public works professionals, and community members with a focus on helping to prepare the Climate Element, otherwise referred to as a Climate Policy Advisory Team (CPAT). CPATs are intended to do the following:

support the analysis of climate information;

- provide recommendations on short- and long-term goals;
- center equity in the creation of policy and the implementation of the Climate Element; and
- represent community voices across the community, particularly overburdened communities.

The City of Tumwater issued invitations to interested individuals within and outside of the city, aiming to capture a mix of representation including:

- subject matter experts including academia and research institutions
- local businesses,
- public officials from the City and the County, and
- frontline communities.

The resulting 11 member CPAT was engaged continuously and substantively throughout the Climate Element Planning process, providing feedback and advice with respect to the following issues and questions:

#### Vision and Alignment:

- What is the short- and long-term vision for this Climate Element?
- How does the City align its Element with other city and regional climate plans and community feedback and priorities?

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#### Public Engagement:

- How should the City engage with residents on the issue of climate change?
- Who are the priority groups and individuals to engage?
- What are the appropriate times and venues for engagement?

#### GHG Reduction and Resilience Analyses:

- Do the findings of the emissions inventory and climate vulnerability and risk analyses align with the community's lived experience?
- How do we effectively and thoughtfully use these analyses to inform the goals and policies in the Climate Element?

#### Policy Development and Planning:

- What should the goals and measures be in this Climate Element?
- Do the respective sub-elements satisfy and align with findings from our analyses and with input from community members?

The CPAT provided direct input and completed multiple rounds of review on the goals and policies throughout the Climate Element. The City expects that CPAT will continue to provide advisory on an as-needed basis to the City of Tumwater as it moves forward with implementing the Climate Element.

#### 3. Public Engagement

Public outreach and engagement were critical components of the Climate Element planning process. The City of Tumwater presented its

Public Engagement Strategy on the City's Comprehensive Plan Update in July 2023. The City developed an addendum to this strategy specific to the Climate Element in June 2024. This addendum detailed the City's approach to engaging community members on the GHG Reduction and Climate Resilience sub-elements.

The City's public engagement strategy for the Climate Element was focused on providing community members with equitable and ongoing access to the planning process. This entailed direct engagement with City staff, as well as multiple in-person and virtual opportunities to provide input on the Climate Element. The City also considered planning fatigue as a limitation, since other elements of the Comprehensive Plan Update were being developed at the same time as the Climate Element. The City utilized two key approaches to engagement for all chapters of the Comprehensive plan including the Climate Element:

- <u>Public workshop</u>: An in-person workshop where participants reviewed GHG reduction and climate resilience analyses, with the intent to learn more about the community's lived experience and vision for the Climate Element;
- Online Story Map: An online platform that provides all relevant analytical and qualitative information pertaining to the two sub-elements. The Story Map set up for the Climate Element provided ongoing feedback to the City throughout the initial development of the Climate Element.

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# 2. Equity and Environmental Justice

## A. Introduction

The City of Tumwater recognizes that climate change, inequity, social justice, and environmental justice are inextricably intertwined. The root causes of climate change and environmental justice are the same – they are systemic outcomes of the exploitative extraction of natural and human resources. Communities across the world, including Tumwater, have suffered from the inequitable distribution of benefits and burdens that are especially relevant to the issue of climate change.

Frontline communities are groups of people that typically experience the impacts of climate change 'first and worst.' They are often made up of marginalized populations, such as Black and Indigenous communities of color and low-income individual and households. Frontline communities are often located in areas that are more exposed to certain climate hazards. They have historically had less political power and fewer resources. They may not have the capacity to respond to these risks due to inflexible work policies or positions. For example, some employers may not pay work is suspended due to a hazard event.

For these reasons, the Climate Element and the Comprehensive Plan more broadly will place the issues of environmental justice and climate equity at the center of planning efforts by establishing goals related to these core problems.<sup>6</sup> Centering equity principles is

essential for the development of a plan that ensures frontline communities aren't adversely impacted further by new plans and policies.

## 1. Community Engagement

Effective community engagement is centered around the following traits:

- mutually beneficial;
- recognizes and values the contributions of all participants;
- focuses on strengths and successes; and
- ensures that all voices are equally respected in shaping decisions whether based on lived experience or technical knowledge.

Tumwater held a public workshop that invited residents to identify priorities and solutions. The in-person workshop was designed to encourage community members who might not always feel welcome or choose to attend public forums to participate. The workshop was held in the ASHHO Cultural Community Center and advertised extensively by City Staff. Over 60 community members attended the workshop. They visited three different stations to learn about and share their lived experience and opinions on GHG reduction strategies, climate hazards and resilience, and local governance. A full summary is included in Appendix B.

specific policies and actions that further equity. A full list of equity-focused policies and actions can be found in Appendix C.

<sup>&</sup>lt;sup>6</sup> One of the overarching goals (CL-1) that guides policy in both sub-elements focuses exclusively on equity and environmental justice, while both sub-elements contain

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#### 2. Equity Goals

All community members, regardless of their background, have an opportunity to benefit from policies and programs. Equity in this strategy is essential to ensure that all communities can participate in and benefit from policies in a fair and inclusive way. Tumwater developed a series of goals and policies to address these concerns using targeted universalism. This means that universal goals are set for everyone, but the targeted approaches are tailored to meet the unique needs of different groups. Using this approach ensures that all communities can achieve the same outcomes, even if the methods differ. This approach integrates various forms of equity, including:

- procedural equity, which ensures that everyone can participate in decisionmaking;
- distributional equity, which ensures that benefits and burdens are shared fairly;
- structural equity, which addresses historical and systemic inequalities; and
- transgenerational equity, which ensures that decisions made today consider their impact on future generations.

Together, these principles create a more inclusive, fair, and sustainable approach to community engagement and policy development.

The following equity goals aim to empower underserved communities, enhance access to resources, and ensure that all voices are represented in decision-making processes. In developing the Climate Element, the City made sure to:

- Develop an accessible, equitable, and engaging Element;
- Meet people where they are and ensure that all engagement efforts are accessible and equitable. This means not excluding anyone with certain health, physical, or working conditions, and it requires that needs around language, mobility, or family care are thoughtfully addressed;
- Focus on reducing inequalities and fostering greater community ownership<sup>8</sup> of the Climate Element which will lead to more equitable outcomes to benefit frontline communities; and
- Seek how best to intentionally allocate resources to overcome the cumulative impacts of institutional racism on historically underserved and underrepresented people.

#### 3. Frontline Communities

In Tumwater, frontline communities face disproportionate challenges related to housing affordability, environmental stressors, and access to essential resources. Since these challenges are disproportionate they require targeted interventions to center equity and

<sup>&</sup>lt;sup>7</sup> Throughout the Climate Element, policies that require community members to meet new, more stringent codes or assessment requirements are supported by implementation actions that call for creating subsidy or rebate programs or developing funds to support low-income community members (see: CL-10.1, CL-10.1.2).

<sup>&</sup>lt;sup>8</sup> All policies and actions that were developed by or with the CPAT or originated from a suggestion from the public workshop or virtual open house are flagged as Community-Identified Priorities so that community members can see their input in action.

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resilience. To address these disparities, the city must identify overburdened communities and vulnerable populations within its jurisdiction. Tumwater is making intentional efforts to understand the cumulative threats these communities face.

Tumwater has aligned with the motto, "no data without stories and no stories without data."

Data confirmed by lived experience can inform how land use planning and policy adjustments may alleviate these issues in ways that align with community needs. To get those stories, the City must:

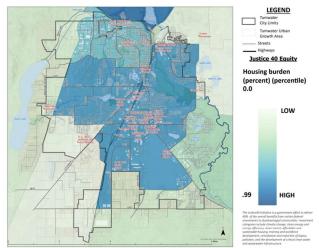
- prioritize collaboration with impacted communities;
- build community capacity; and
- foster meaningful relationships with community members and communitybased organizations.

This work ensures support is both impactful and aligned with local priorities. Tumwater's equity goals align closely with the Justice40 Initiative. The Justice40 Initiative aims to ensure historically disadvantaged communities receive benefits from infrastructure investments, including clean transit investments. Throughout this project, Justice40 and other equity-related data were used to inform decisions and guide resource allocation.

#### Housing Burden

The Justice40 Equity framework is applied in Tumwater to address housing affordability. This focuses attention on areas where communities are disproportionately burdened by high housing costs. The city can identify where resources and support should be allocated to reduce financial strain on households. This

Map 2. Map of Tumwater with a Justice40 overlay that displays the differences in Housing Burden across the City.



"Most of us senior citizens do not have the money to add insulation, although we are exposed to the increase in temperatures more rapidly than most stick-built homes. Help us upgrade the mobile homes we live in. Our rent is being increased annually and on a reduced fixed income leaves little money for improvements."

approach aligns with federal initiatives aimed at directing 40% of benefits from federal investments to underserved and overburdened populations. Reducing housing burdens contributes to broader goals of increasing housing equity, improving affordability, and fostering resilient communities.

#### **Unemployment Rates**

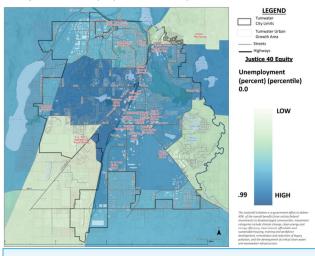
Applying the Justice 40 Equity framework to unemployment rates aims to address disparities in employment opportunities, particularly in areas with higher rates of joblessness. Identifying regions with elevated unemployment levels allows the city to prioritize economic development initiatives, job

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training programs, and workforce support services for communities most in need. This data-driven approach is critical for fostering economic resilience and reducing inequities.

Map 2. Map of Tumwater with a Justice40 overlay that displays the differences in Equity across the City.



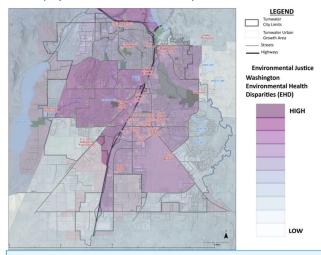
"Something that improves the lives of poor and working class people. More bike and ped infrastructure in Tumwater - make it not only safe, but inviting for people to get out of their cars.."

#### **Environmental Health Disparities**

The Environmental Health Disparities (EHD) analysis in Tumwater highlights areas with higher environmental justice concerns. This analysis shows where communities may be more vulnerable to pollution, health risks, and other environmental hazards. By identifying regions with elevated environmental health disparities, Tumwater can target these areas for interventions to:

- mitigate health risks,
- improve air and water quality, and
- enhance access to green spaces.

Map 3. Map of Tumwater with an Environmental Justice overlay that displays environmental health disparities.



"During the June 2021 heat wave, I experienced heavy sweating, heart racing and flushing. It felt like my brain was in a fog and I felt weak and fatigued. I recognized these symptoms as the symptoms of heat exhaustion and went to the mall to escape the heat for a while. We did not have air conditioning in our home, and as there was almost no wind, opening the windows couldn't help. Our house got hotter than it was outside. I am 71 years old, so such heat is especially dangerous for my health"

This approach aligns with the principles of environmental justice, ensuring that communities disproportionately affected by environmental and health challenges receive focused support, resources, and protections to improve overall public health and quality of life.

#### 4. Evaluating Equity within Strategies

When communities can actively participate in decision-making, policies are more likely to reflect local realities and provide meaningful,

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sustainable impacts. Collaborative governance empowers the communities most affected by social and environmental challenges, fostering self-determination and reducing systemic inequities. Targeted benefits emphasize the right to healthy environments. This approach also explicitly prioritizes support for those experiencing the highest cumulative risks.

Each measure is assessed in accordance with the Intermediate Planning Guidance's Equity Criterion Matrix which helps determine if the measure is deemed equitable in its respective jurisdiction. The matrix, as shown in Table 1 provides questions for co-governance, targeted benefits, just responsibility, and wealth building considerations/sub-considerations to assess for each climate measure.

Table 1: Washington Department of Commerce's Equity Criterion Matrix

#### Co-Governance

#### **Consideration:**

Does the measure show potential to build selfdetermination for frontline communities of color and/or low-income communities?

#### **Sub-considerations:**

Are communities' most impacted identifying their needs and solutions?

Do they have the ability to meaningfully shape the decisions in implementation?

#### **Targeted Benefits**

#### Consideration:

Is the measure clear about rights to healthy communities, and explicit in targeting interventions to communities furthest from achieving those rights?

#### **Sub-considerations:**

Do the goals and targets recognize our fundamental rights to healthy environments and communities?

Do the strategies prioritize those most at risk from highest cumulative impacts?

#### **Just Responsibility**

#### **Consideration:**

Does the measure show potential to directly limit harm and hold offenders responsible? Does it prioritize effectiveness?

#### **Sub-considerations:**

Is the solution directly stopping the problem? Is it making anything worse?

Are those causing the greatest harm held most accountable?

#### **Wealth Building**

#### **Consideration:**

Does the measure show potential to invest in and sustain local livelihoods, starting with communities with the greatest barriers to meeting their needs?

#### **Sub-considerations:**

Are we supporting production by local communities for local communities, based on a principle of using local resources and living wage labor?

Using this system of continuous engagement and evaluation of equity criteria throughout plan development, 24% of the policies and 27% of the actions in the Climate Element directly address issues of equity. Additionally, 10 of the plan's 16 goals contain equity considerations.

Frequent and multifaceted public engagement also led to a plan in which 19% of the policies and 18% of the actions were developed directly out of requests, input, and ideas generated through the public workshop, virtual open house, and CPAT meetings.

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## 3. Greenhouse Gas Reduction

## A. Introduction

Under HB 1181, cities and counties that are required to prepare Climate Elements as part of their Comprehensive Plans must include a subelement on greenhouse gas (GHG) emissions reduction. The City of Tumwater's GHG Reduction Sub-Element dictates the City's approach to eliminating GHG emissions towards achieving net-zero emissions by 2050, with interim targets for municipal and community-wide emissions.

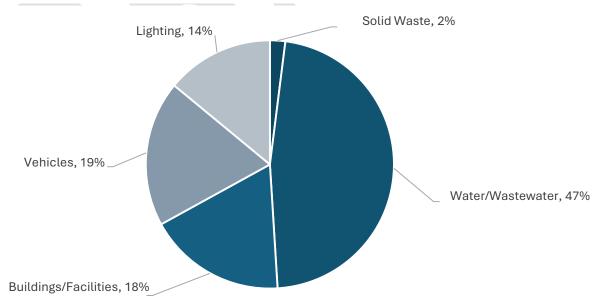
#### 1. Greenhouse Gas Emissions

Greenhouse gases refer to specific gaseous compounds that trap heat from the sun after it radiates from the Earth's surface. GHGs include, but are not limited to, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Some greenhouse gases are naturally occurring, or 'biogenic,' whereas others are produced by

human activity, or are 'anthropogenic.' Greenhouse gases are essential to life on earth: they prevent heat from escaping Earth's atmosphere.

However, increased anthropogenic emissions from burning fossil fuels and land use changes like deforestation, have rapidly and significantly increased the concentration of GHGs in the Earth's atmosphere. This increased volume has resulted in a global warming effect that is shifting climate and weather patterns across the world. This phenomenon has far-reaching impacts on communities, infrastructure, ecosystems, and wildlife (see Section 4 on "Climate Resilience"). As a result, it is critical that cities like Tumwater take action to reduce anthropogenic GHG emissions, and to do so as quickly as possible.

Figure 2. City of Tumwater 2023 Municipal GHG Emissions Inventory



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#### 2. Measuring and Reducing Emissions

Tumwater developed a series of goals and policies to reduce greenhouse gas emissions across the city. These were informed by municipal and community-wide GHG emissions inventories, providing an accounting of the city's largest sources of GHG emissions. The City drew upon these emissions inventories to help determine the specific goals and policies for the GHG Reduction Sub-Element. These goals and policies align with feedback from community members, the Thurston County Climate Mitigation Plan, and statewide regulations and climate goals.

#### 3. Greenhouse Gas Emissions Targets

The City of Tumwater's GHG Reduction Sub-Element dictates the City's approach to eliminating GHG emissions towards achieving net-zero emissions by 2045. The City 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 the city of Tumwater, including but not limited to residential, commercial, and transportation sectors).

#### Municipal emissions goals

Based on the City's current municipal emissions, Tumwater is establishing an interim target of reducing emissions by 50% from 2023 levels by 2030 on its way to net-zero emissions by 2045. These municipal emissions milestones keep the City ahead of statewide emissions reduction goals through both 2030 and 2045.

Based on the City's current community-wide emissions, Tumwater is establishing an interim target of reducing emissions by 45% from 2023 levels by 2030, and 70% by 2040 on its way to net-zero emissions by 2045. These milestones align with statewide emissions goals through 2040, while exceeding the State's requirements by 2045.

## 4. Municipal Operations Greenhouse Gas Emissions

For this Climate Element, the City of Tumwater is utilizing a municipal inventory of its GHG emissions from calendar year 2023. Per the Washington State Department of Commerce's Intermediate Guidance on GHG Emissions-Reduction Pathways, the City exercised Pathway 3 – Create GHG Emissions Inventory, coordinating with an external expert to prepare a comprehensive municipal emissions inventory for 2023.

In that year, Tumwater's municipal emissions totaled 3,821 MTCO<sub>2</sub>e, with the leading sources of emissions including electricity used to provide water and wastewater services to residents (47%), gasoline, diesel, and electricity used to power city vehicles and equipment (19%), and electricity and natural gas used to power the City's municipal buildings and facilities (see Figure 2).

Water and wastewater services

Water and wastewater services are critical operations for the City of Tumwater and residents. The emissions from these operations

Community-wide emissions goals

<sup>&</sup>lt;sup>9</sup> Greenhouse gas emissions are measured in metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e).

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are 47% of the City of Tumwater's municipal emissions. The emissions from electricity used to provide water and wastewater services to the city largely stem from water wells and wastewater lift stations. Electricity is used to power pumps in water wells and wastewater lift stations.

#### Fleet vehicles

Emissions from the City's fleet vehicles make up 19% of municipal emissions. Of these emissions, 75.5% are attributed to gasoline fuel vehicles, while 24.3% are attributed to diesel fuel vehicles. Electric vehicle (EV) emissions contribute 0.2% of vehicle emissions for the City of Tumwater's fleet.

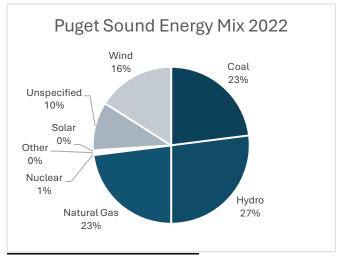
Municipal lighting makes up approximately 14% of the city's municipal GHG emissions.

Municipal lighting includes traffic signals, streetlights, lights, and other outdoor lighting throughout the city.

#### Electricity and power content

Much of the City's GHG emissions can be attributed to the electricity used to power its

Figure 3. Puget Sound Energy 2022 Power Content Mix



The Washington State Department of Commerce funded the development of GHG emissions inventories for

assets. Emissions from this source are directly attributed to the power content of the electricity that the City procures from its utility, Puget Sound Energy (PSE). Under the State's Clean Energy Transformation Act, utilities like PSE are required to provide fully clean, renewable energy by 2045. As of 2022, PSE's electric power content (see Figure 3) includes natural gas (23%) and coal (23%), which explain much of the emissions coming from the City's electricity use. As PSE's power content improves and more clean energy sources are used to power the electric grid, emissions from municipal assets will decline.

## 5. Community-Wide Greenhouse Gas Emissions

The City did not conduct its own communitywide GHG emissions inventory. Instead, Tumwater's community-wide emissions were derived from the 2022 Thurston County GHG emissions inventory.<sup>10</sup> Community emissions includes those produced by residential, commercial, industrial and agricultural and other activities outside municipally owned assets and operations. While this emissions inventory accounts for jurisdictions and land area that falls outside of the jurisdiction of Tumwater, it still provides key insights into emissions across different sectors., Tumwater exercised Pathway 1 – Conduct GHG Emissions Estimate – according to Commerce's Intermediate Guidance to derive its communitywide emissions from another source.

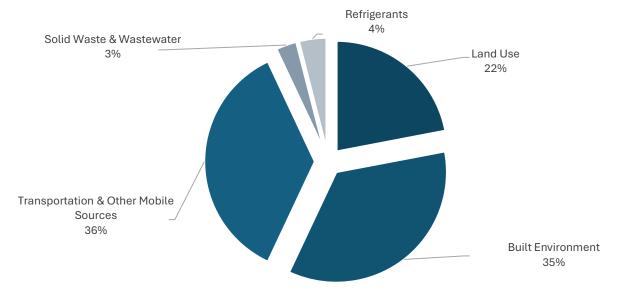
Thurston County GHG emissions in 2022 (see Figure 4) amounted to 4,240,135 MTCO<sub>2</sub>e (or 14.1 MTCO<sub>2</sub>e per capita). A majority of

the State's eleven largest counties, including Thurston County.

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Figure 4. Thurston County 2022 Community-wide GHG Emissions



countywide GHG emissions are from the transportation sector (36%), which largely comprise emissions from on-road vehicles (e.g., passenger vehicles, freight and service vehicles etc.). Other transportation emissions can be attributed to:

- public transit,
- off-road equipment,
- aviation, and
- marine and rail.

The built environment makes up the second largest source of emissions in Thurston County (35%), largely stemming from natural gas and electricity to power buildings.

In 2022, Thurston County had approximately 19,518 acres of agricultural cropland. Land use from agricultural activities contributed 22% of GHG emissions countywide, with nearly half of those emission stemming from methane production at dairy farms. Land use emissions

also include emissions from tree cover loss in the county.

Smaller sources of GHG emissions countywide include:

- emissions from solid waste and wastewater (3%), which include generation and disposal of solid waste, commercially processed compost, and wastewater treatment, and
- emissions from refrigerants (4%), which include use and leakage of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and CO<sub>2</sub> from ozone depleting substances (ODs) that are used to cool buildings and other assets.

Vehicle Miles Traveled and Land Use

Vehicle Miles Traveled (VMT) is a measure of the number of miles traveled by vehicles in a geographic area. In 2023, the Thurston County VMT was 2,404,917,000 total, and 7,927 per

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capita. Increasing public transit ridership, carpooling, and increasing modes of active transit (biking, walking) all reduce VMT, and emissions from transportation.

VMT can also be reduced through land use and urban planning. Urban sprawl increases the number of miles for daily trips such as commuting to work, or running errands. Denser

city development reduces VMT by reducing the distance of these trips. Additionally, planning public transit routes, bike lanes, and micro mobility between denser areas of housing and commercial centers contributes to lowering VMT.



## 4. Climate Resilience

## A. Introduction

Climate adaptation aims to prepare a community for the inevitable impacts of climate change. These impacts are already being felt and can no longer be lessened by climate mitigation activities alone. At the core of climate adaptation is community resilience. The goal of resilience is that a community not only recovers after a climate-related disaster but bounces back better. Effective resilience requires policies that support a mix of disaster preparedness, response, and recovery activities. Policies should also address systemic underlying issues. Climate adaptation can include:

- repairing and enhancing existing infrastructure,
- restoring natural systems that provide a variety of ecosystem services,
- providing educational resources on individual resilience actions, and
- enacting policies that provide legal protections.

During implementation it is important to continuously engage broadly across the entire community to ensure adaptation actions are:

- equitable,
- provide benefits for frontline communities, and

 designed to avoid or mitigate unintended negative consequences.

Effectively building resilience requires acting across all sectors:

- Agriculture and Food Systems,
- Buildings & Energy, Cultural Resources,
- Economic Development,
- Ecosystems,
- Emergency Management,
- Health & Well-being,
- Transportation,
- Waste Management,
- Water Resources, &
- Zoning & Development.

Tumwater has combined these 11 sectors into 8 focus areas:

- 1. Buildings & Energy
- 2. Community Well-being & Preparedness
- 3. Cultural Resources
- 4. Ecosystems
- 5. Local Economy, Zoning & Development
- 6. Transportation
- 7. Water Resources
- 8. Agriculture, Food Systems, & Waste Management

## B. Projected Climate Impacts

Tumwater is exposed to many natural hazards, several of which are projected to be exacerbated by climate change in the coming decades. Although the city has laid out mitigation actions

for high-risk hazards through the County's Hazard Mitigation Plan (HMP), the mitigation actions laid out in the HMP plan were not created through a climate lens. Further,

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traditional hazard mitigation tends to focus on infrastructure upgrades alone, neglecting social, behavioral, and institutional adaptation actions. All of these must be implemented in conjunction with infrastructure to effectively build resilience to climate change impacts.

Table 2: Tumwater Climate Projections, Low & High Emissions (Data Source: Climate Impacts Group Climate Mapping for a Resilient Washington Tool)

	By 2100	
Climate Projection	Low emissions scenario	High emissions scenario
Average summer temperature in June-August	↑ 5.4°F increase	↑ 9.5°F increase
Summer maximum temperature	↑ 4.7	↑9.6
Number of hot days (humidex over 90 degrees)	↑ 29.1 days	↑ 58.2 days
Total annual precipitation	no data	↑ 5.1% increase
Intensity of extreme rainfall events (change in the magnitude of 2-year storms)	no data	↑ 14% increase
Percent change in the magnitude of 25-year storm	no data	↑ 25% increase
Peak streamflow	↑ 15% increase	↑ 14% increase
Return interval of 25-year peak streamflow	↓ 9.6 years	↓ 13.8 years
Likely sea level rise	↑ 2.17 ft. increase	↑ 2.67 ft. increase
Change in high fire danger days	↑ 7 days (by 2040)	↑ 10 days (by 2040)
Precipitation drought (likelihood of a year with summer precipitation below 75% of historical normal)	no data	↑ 38% increase
Total late summer precipitation July-September	no data	↓ 22% decrease
Percent change in April 1 snowpack	no data	↓ 100% decrease

By 2050, Tumwater is projected to experience hotter temperatures, especially during the months, with higher summer average temperatures and a greater number of days each year that are considered extremely hot. The City will also experience more frequent and more intense precipitation events, with no projected change in annual rainfall but less precipitation falling during the summer months. There will also be a reduction in winter snowpack and an earlier start to seasonal snowmelt, resulting in altered streamflow regimes. Although Tumwater is not projected to experience drastic sea level rise in this period, the city could begin to experience impacts on groundwater water

quality due to saltwater intrusion or other climate-related impacts.

All of these projected impacts will lead to more frequent and more intense disaster events in the City, including:

- more extreme heat waves,
- more frequent and severe urban and riverine flooding,
- a higher likelihood of wildfires and the accompanying risk of smoke,
- a higher likelihood of drought due to high temperatures and lack of summer rain, and

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 a higher risk of landslide activity due to heavier rainfall, saturating soils and wildfires removing supportive root structures. Tumwater is also projected to experience an increase in vector-borne illnesses, pollen-related air quality issues, and other public health hazards.



# Appendix A Foundational Documents

The purpose of this gap analysis was to evaluate the existing policy framework to identify both its strengths and weaknesses. The analysis focused on assessing policies in the areas environmental, economic, and community aspects, while also evaluating responses to various risks such as climate change impacts and natural disasters.

-The analysis aimed to provide a comprehensive understanding of the current policy landscape, highlighting both effective areas and critical gaps and shortcomings in policies. The overall goal was to develop a more comprehensive and inclusive policy framework that effectively addresses diverse needs and challenges, thereby enhancing community well-being and ensuring long-term sustainability.

An extensive literature review compiled a total of 107 resources to explore climate planning and mitigation strategies. These resources covered a wide range of topics including:

- forestry and urban green spaces,
- transportation and air quality,
- equity and community involvement,
- regulatory and policy frameworks, as well as
- hazard and risk management.

From this comprehensive collection, a detailed policy analysis focused on key plans to assess their content and relevance. 362 relevant policies were extracted from the 16 plans shown in the table below.

Table 3: Data Gap Analysis Documents

Plan	Description
Thurston County Hazard Mitigation Plan (2023)	Outlines a multi-jurisdictional strategy to reduce the risks of the most destructive natural hazards such as floods, earthquakes, and wildfires that threaten communities in Thurston County.
Thurston Climate Adaptation Plan (2018)	Climate Resilience Actions for Thurston County and South Puget Sound.
Thurston County Climate Mitigation Plan (2020)	Lays out a roadmap for continuing regional collaboration on reducing local contributions to climate change and actions that can help to achieve GHG reduction goals.
Clean Energy Transformation Act (CETA) (2019)	CETA aims to transition Washington to a clean energy economy by eliminating coal-fired electricity by 2025, achieving 100% carbon-neutral electricity by 2030, and 100% carbon-free electricity by 2045.





Tumwater Urban Forestry Management Plan (2021)	Lays out goals and recommendations for sustainably managing Tumwater's urban canopy.
Tumwater Tree Inventory and Maintenance Plan (2024)	Outlines inventoried tree resources (distinct species compositions, age distribution and condition).
Tumwater City Plan 2036 - Transportation Master Plan (2016)	It outlines the transportation goals, policies, and strategies for the community. Aims to improve mobility, safety, and accessibility while promoting sustainable and efficient transportation systems.
Tumwater City Plan 2036 - Conservation Element (2016)	Outlines natural resource land conservation and critical area protection.
Tumwater City Plan 2036 - Land Use Element (2016)	It outlines policies and guidelines for land use planning and development. Aims to promote sustainable growth, protect natural resources, and enhance community livability.
City of Tumwater Shoreline Master Program (2014)	Provides guidance for positive, equitable use and development of the shoreline while promoting community well-being, ecological preservation and compliance with state policy
Tumwater City Plan 2036 - Lands for Public Purposes Element (2016)	Details the public facilities and services planning for 20 years (after 2016), including essential public facilities siting and expansion.
City of Tumwater and Thurston County Joint Plan (2021)	Cities of Lacey, Olympia, and Tumwater and Thurston Country initially agreed upon the process of joint plan. It aims to guide future development in the unincorporated portion of Tumwater's urban growth area, ensuring a smooth transition from rural to urban development.
Olympia Climate Action Annual Report (2019)	The goals are establishing framework for climate- focused decisions, set foundation for solar and green building community, create city staff culture of climate awareness, green the city's fleet and facilities, build foundation for climate-friendly infrastructure, and build and leverage partnerships.

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Puget Sound Energy (PSE) Green Direct Program

PSE's Green Direct program allows government and commercial customers the ability to purchase 100% of their energy from a local, renewable energy resource that is cost-efficient.

Washington Clean Fuel Standard (2023)

The standard will reduce carbon pollution from transportation by decreasing emissions from the production and supply of transportation fuels. It will also provide an increasing range of low-carbon and renewable alternatives to improve air quality and decrease dependency.

The detailed policy analysis involved categorizing the reviewed resources into sectors, focus areas, and climate hazards to systematically evaluate their coverage and identify gaps. The categorization was as follows:

#### Sectors:

- Agriculture & Food Systems
- Buildings & Energy
- Cultural Resources & Practices
- Economic Development
- Ecosystems
- Emergency Management
- Health & Well-being
- Transportation
- Waste Management
- Water Resources
- Zoning & Development

#### Focus Areas:

- Climate Resilience
- Climate Mitigation
- Climate Equity

- Drought
- Extreme Heat
- Flooding, Extreme Precipitation, & Sea Level Rise (SLR)
- Wildfire
- Earthquake
- Landslide
- Snowpack Reduction/Snowstorms

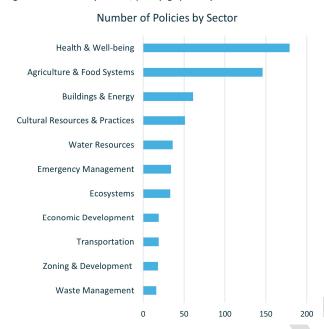
Conducting a thorough policy analysis was essential to understand the current stance on various policy areas. This detailed inquiry revealed several important findings. Firstly, there is a robust framework of policies addressing ecosystems, zoning, and development. These existing policies underline a strong commitment to natural resource management and land use governance. However, the analysis has also revealed notable gaps in other areas. Specifically, there is a gap in policies related to cultural resources, practices, and economic development. This indicates a need for more comprehensive strategies that integrate and support these important aspects of the community.

Hazards:

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Figure 5. Policies by sector, policy gap analysis



Moreover, while many policies prioritize climate resilience—aiming to safeguard the environment against the impacts of climate change—there is a noticeable gap in policies that address climate equity. This gap suggests that,

although the city is preparing for climate-related challenges, they are not equally addressing the impacts on diverse communities and ensuring that all groups benefit from climate resilience efforts. Additionally, nearly all resilience policies originated from County-level

Figure 6. Policies by focus area



Thus, this policy analysis underscores the importance of developing a more balanced and inclusive approach that not only fortifies the city's climate resilience but also promotes equitable outcomes for all stakeholders.

## Appendix B Engagement Results

Community input was collected in three ways: the CPAT, the in-person public workshop, and the Virtual Open House. The CPAT provided feedback on each draft of the Climate Element and worked with City Staff in small working groups to develop specific policy and implementation action language and review language recommended by the City. Community input from the in-person public workshop was collected via notes taken during each breakout session, sticky notes left on posterboards and maps, and anonymous comment cards. Finally, the Virtual Open House included multiple

surveys to collect public opinions on preferred climate mitigation methods, equity, and lived experiences with climate change in Tumwater.

Policies and implementation actions driven by community input through one of these three channels are marked as Community-Identified Priorities within the Climate Element. The responses to Virtual Open House Surveys and a high-level summary of input received at the inperson workshop, both of which informed policy development, are found below.

### In-Person Workshop

Across all focus groups, participants called for greater collaboration and engagement citywide, as well as a need to identify funding sources and provide financial incentive, safeguards, and subsidies to ensure equitable climate adaptation and mitigation.

### **GHG Reduction Focus Group**

Key discussion themes included:

- Multimodal Transportation System
   Improvements: requested actions ranged from expanding public transit access, enhancing bike accessibility and walkability, reducing car dependence, and increasing EV charging capabilities.
- <u>Sustainable Land Use:</u> participants urged for preservation of green spaces and urban canopies, denser urban development, and elimination of minimum parking requirements.
- Energy: participants suggested measures that would improve energy efficiency in buildings and encourage renewable energy generation and use.

### **Resilience Focus Group**

Participants highlighted several key issues they would like to see addressed in Climate Element policies:

- <u>Equity & Environmental Justice:</u> Building resilience in low-income, historically disadvantaged areas that are disproportionately impacted by climate change.
- <u>Climate Hazards:</u> Actions that will address issues like wildfire smoke, power grid interruptions, and drought.

- <u>Sustainable Practices:</u> Managing water resources for Tumwater's future communities through water conservation methods and integrating and expanding use of renewable energy sources.
- Urban and Land Use Planning: Improving connectivity, walkability, and bike infrastructure, implementing strategies to increase shade and mitigate urban heat islands, and managing Tumwater's projected population growth and housing needs sustainably and equitably.
- Wise Resource Management: Reducing reliance on resource-intensive industries and promoting and supporting sustainable businesses.

### **Governance Focus Group**

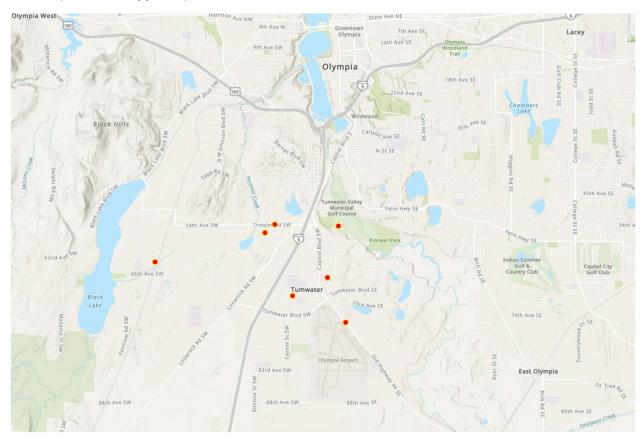
Participants voiced several areas of concern and opportunity regarding City governance:

- <u>Building Public Trust:</u> Participants noted some wariness due to previous perceived failures to address community needs by the City in past efforts, particularly highlighting skepticism of long-term residents.
- Improving Communication: Finding ways to continuously and effectively communicate with diverse age groups and demographics, including targeted outreach to youth and underrepresented groups
- <u>Clarity and Transparency:</u> Present community members with clear costbenefit analyses of proposed actions and ensure Climate Element development is transparent and accessible.

### Virtual Open House

#### **Equity**

Click on the map to place a pin on areas you're concerned about in terms of pollution, contamination, and/or inequitable benefits (like tree canopy cover).



# What would you like Tumwater to do to address environmental justice issues and ensure that all residents have equal quality of life both before and after climate disasters?

Create programs and incentives that support resident access to clean energy, such as heat pumps, solar, and EV chargers. Include specific carveouts for low-income and elderly populations.

The ability to walk or roll around our community is a transportation method not dependent on income or on the presence of fuels or electricity. Having a fully accessible, walkable community will be resilient as well.

Sidewalks along Trosper Road and nearby streets are incomplete. Many older residents live in this area and need safe walking routes to get to the commercial area to the east.

Provide safe walking and cycling throughout the city. This is important to reduce emissions and pollution. It is also important so that people can move around if fuel becomes scarce or some services are not accessible by car. It is also important that people who need to get to transit can walk safely to reach a bus stop. Transit cannot go everywhere, so that means that people need safe walking routes to and from their home and services and destinations.

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I believe the City is in need of more cooling & heating centers for community members. This summer was relatively cool but investing in at least one other area in a different part of Tumwater to support heating & cooling for community members would be a great idea.

I also really liked an idea I heard at the ASHHO event, which was to find a way to repurpose abandoned parking lots that become heat islands during extreme weather events. If these lots cannot be repurposed right away, maybe trees can be planted in the sidewalk areas that border these lots, to help shade the parking lots somewhat when it's really hot outside. Or, maybe we could consider building simple structures that could provide shade over parts of certain heat islands. An empty parking lot on a busy road that had some sort of shade structure with a bench or two underneath it could help a severity of heat coming from that asphalt and also give passerby a place to sit in the shade on hot days.

My concern is putting warehouses near schools. The Tumwater planning dept. should not allow this. Schools need better air quality nearby, not trucks going to and from large Port of OLY. warehouses.

My concern is water quality. The Port allowed a Coca Cola plant to lease a parcel in Tumwater. My concern is allowing a industrial plant to bottle our water to be shipped out of state. I do not think we have enough scientific evidence that Tumwater has enough available water for the next 20-25 years to do this. The town of Lacey has water restrictions. This is a big deal. Do we have enough water for the next 40 years of growth? We should not allow industry to take our water!

Protect the Davis Meeker Garry Oak!

The Davis Meeker Garry Oak is sacred to several Coastal Salish Tribes, as well as many Tumwater residents. The DMGO is located on the historic Cowlitz Trail (parts of which became Old Highway 99), and is fairly close to the site of the Bush Family Farm. The City of Tumwater needs to protect the DMGO as one of the only visible reminders of the Cowlitz Trail, and our shared history. The DMGO provides important habitat for birds, as well as sequestration of atmospheric carbon. Too many large trees have been removed in Tumwater already.

There are many mobile home parks in Tumwater.Most of us senior citizens do not have the money to add insulation, although we are exposed to the increase in temperatures more rapidly than most stick-built homes. Help us upgrade the mobile homes we live in. Our rent is being increased annually and on a reduced fixed income leaves little money for improvements.

In a wildfire or incident, how would large numbers be able to exit on the present two- lane roads? Are there enough fire stations, equipment & responders? Would the city be able to expedite building permits to rebuild?

### **GHG**

### What is your lived experience with climate change? Does it change seasonally?

I don't really know - I try to rely on data.

I wonder, when it gets hot in the summer, or wet in the winter, whether climate change is showing up, or whether it's just local variation.

I have experienced the heat events but fortunately my health has not been impacted. I also have noted the increase in smoke events.

Summer wildfires are much more frequent in this area compared to when I was a kid growing up here. Summers are hotter.

Our rivers and streams are low. We have less rain. Our thick forests are super dry in the summer. We could have a massive forest fire (my sister went through this in another town, her area was wiped out by fire). We must be aware of how much water we remove from the water table. We must not allow industry into our area that will contribute to lowering the water table.

I purchased a portable a/c for my apartment about 4 years ago to help with the heat. But I am not convinced still that it is related to climate change. I believe the earth goes through cycles like this, it just wasn't tracked 100's of years ago. Tracking temperatures has only been happening for the last 150 years or so.

I am noticing longer hotter and drier summers.

Aware of increased heat in summer & more snow days in winter. We are less active in summer due to heat and more careful of road conditions in winter. Have been impacted by smoke from fires in other areas.

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### Have you made any changes to your home or routine due to climate change or its effects?

I haven't made any changes, but I was pleased to buy a home with a heat pump since it gets pretty warm during the summer.

We installed a single split heat pump in the back of our house; replaced our old gas water heater with a new heat pump water heater; went from our plug-in hybrid to a full battery electric; put in a 240 charger; and signed up for PSE's community solar and their time of use rate program. We don't eat red meat any more (except for occasional bacon and for meat on pizza); We don't fly for vacations.

Went to ductless system from burning wood for heating house. Electric bill has gone up but overall less work/time to heat house.

Yes, we purchased a window-install AC unit. (heat pump) to prepare for heat events. This was the best choice for us since retrofitting our entire home would be expensive. We also have air filters now.

Yes, I've made many changes, but I've also not been able to make all the changes i'd like to because of budget constraints. I drive an EV, I bike to work in the warmer months, I eat a mostly plant-based diet, I've taken my investments out of fossil fuels, and I'm active in local climate groups.

Air conditioning is more necessary for quality of life than it used to be in this area.

I try to commute by bike as much as I can to reduce my personal carbon emissions.

We bought 23 solar panels to our house. Our electric bill is lower now. We travel less, so less Green house gas (GHG) emissions.

I try to recycle as much as possible....but because it is a good thing to do. Not because of climate change.

In the fourteen years I have lived here, I have had to add AC to my home due to summer heat in the last five years. I am sensitive to heat and have to abstain from participating in outdoor activities or un-airconditioned locations on hot days. In my work, I am required to work outdoors but have the flexibility to choose when I can work outdoors. My schedule has had to change due to high heat days.

Have added a portable air conditioner. Have had to adapt a homemade window screen to deter smoke and wear masks outside.

#### What greenhouse gas mitigation would you like to see improved, enhanced, or created if it doesn't exist now?

Require landlords to implement pollution reduction and safety upgrades on their rental housing. Prevent them from undue increases in rental fees.

Prevent new development in tree areas - protect trees from removal.

I would like to talk more about the buildings portion - how can that be reduced?

More community education and outreach about the issues, and opportunities for individual action, available incentives, household planning for gradual electrification. Education and outreach about consumption emissions. Add building recommissioning to the actions in the regional climate plan. EV group purchasing program.

Time limits on car charging stations, some public stations (city parking lot) have cars parked in them all day even though they are fully charged in less then 2 hours. This leaves limited charging space for others to use.

Stop allowing building of homes and services that are not near already established services and transit. We need to grow with density in order to support efficient transit and allow for non-motorized travel. This is an action in the regional Climate Plan. Spreading out beyond existing services is going to increase emissions and miles driven. It also creates inequitable and unaffordable housing which requires ownership of a car. Lowering emissions means we live closer together and drive much less.

Something that improves the lives of poor and working class people. More bike and ped infrastructure in Tumwater - make it not only safe, but inviting for people to get out of their cars.

Better community planning that reduce sprawl and car-dependency; improved non-motorized transportation options/infrastructure; increased public transit reliability and awareness; higher cost to GHG-emitting modes

Technical Information



Do we have enough electric charging stations?

I doubt it.

We bought an electric vehicle.

WE NEED MORE ELECTRIC CHARGING STATIONS!

Any improved mitigation would be appreciated.

Take a look at the committed goals and actions identified in the Thurston County Climate Mitigation Plan. Do you feel there are goals and actions missing? Are the goals and actions identified in the TCMP still what the community wants to commit to?

We continue to float along about the 50% of local reductions that the plan says are supposed to come from afforestation. Creating 37,000 acres of new forest seems totally unrealistic. This requirement doubles if we use the estimates for sequestration TRPC adopted in its white paper, even though the ICLEI methodology they said they were using actually recommends using local sequestration estimates when those are available, which is what the plan does.

We're also going to get a significantly larger reduction from recent State legislation that the plan estimates). We ought to have a plan that's based on facts and realistic estimates, even if that means we have to recognize that we can't make the reductions we need with our local capacities alone.

I feel like there definitely could have been a goal for increasing the amount of space available for walking and biking. I feel like we should invest more money into improving areas of town to be more walkable and bike-able. Improve spaces to be used by modes of transportation that don't burn fossil fuels. I also don't see anything mentioned about improving the structures of our buildings to waste less energy.

Yes - please continue to commit to the TCMP! And take the actions in the Plan. There are plenty of actions to take. Don't think that doing a handful is enough. We need to do almost all of the actions in order to save our planet.

Regulating large polluters in whatever ways the City can

YES, we want to commit to lowering our GHG emissions.

Do we have enough electric vehicle charging stations in Tumwater?

NO!

We have an electric car.

We need more charging stations.

#### **Resilience Mapping: Flooding**

No responses

### **Resilience Mapping: Heat**

#### What has been your experience with extreme heat in Tumwater?

Living here during heat waves and/or heat domes. Many housing units don't have air conditioning, especially rentals.

Duuring the June 2021 heat wave I experienced heavy sweating, heart racing and flushing. It felt like my brain was in a fog and I felt weak and fatigued. I recognized these symptoms as the symptoms of heat exaustion, and went to the mall to escape the heat for a while. We did not have air conditioning in our home, and as there was almost no wind, opening the windows couldn't help. Our house got hotter than it was outside. I am 71 years old, so such heat is especially dangerous for my health. After this heat wave we contracted to install a heat pump in our house. This has made our life much more comfortable in the last few years, and when the next heat wave comes we will be protected. I was very concerned for my neighbor who lives alone and is much older and quite frail and does not have air conditioning. I have told him that we will check on him in future heat wave, and he can shelter with us. I worry about the health of so many other people who are similarly at risk.

#### Technical Information



Have you had access to all of the resources you needed during an extreme heat event? Is there anything you would like to have available to you in the future?

Portable a/c units or heat pumps that I could rent or borrow during heat events

We did not have any air conditioning for the June 2021 heat wave, and suffered for not having what we now consider essential with our changing climate. We have lived in Thurston County for 36 years and nevver had air conditioning until we installed our heat pump after this heat event. Many of our friends are in the same postion. We need a robust program to help our residents have a safe home. I would not want to go to a cooling shelter, and Tumwater's shelter is only available during the daytime and would be very crowded. People need to be able to protect themselves at home.

### **Governance**

#### What does a resilient Tumwater look like to you?

Great looking plan.

People can walk and cycle safely without needing to own a car. Homes and services are located so that people can access services and schools without driving. There are no homes or businesses in the areas where flooding will happen. A transit system is in place along major corridors. That transit provides access to other communities and helps move people along Tumwater corridors.

Improved transit and non-motorized connectivity; emphasis on density and mixed-use zoning; protection and restoration of our precious natural resources; restoration of derelict properties

A resilient Tumwater would protect the basic needs of the community, including clean water; available housing with limited restrictions for homeowners who want to add ADUs to assist in that effort; encouragement of business growth; and clean and repaired streets.

#### What do you hope will be true about Tumwater in the future?

I would like to see all the warehouse roofs covered with solar panels. I recommend that be a requirement for all new warehouse construction, otherwise, that is just wasted real estate, missing the opportunity for developing the backbone of a distributive electric grid. Better to do it there than on agricultural land or forested land.

More stringent building codes for renewable electrification across the board. ... EV-ready, etc.

People have their basic needs met and they are happy to live in Tumwater. There are electric vehicles on our streets, but there is not congestion and people who walk and cycle can do so safely.

Improved transit and non-motorized transportation; significant decrease in per capita vehicle miles traveled; higher density housing and mixed-use zoning

That it will be a city that is proud of it's beauty and inclusion.

Are there areas within the city you are most concerned about regarding climate change impacts? If so, what are those areas?

Areas near Deschutes River and creeks... all vulnerable to heavier rainfall amounts as the climate changes. not so much areas, but income-levels

### How would you like the city to engage with you around climate change?

Having staff out in the community is good.

### What could the City do to improve your trust in it/them?

The City will improve my trust in them by following through to actually take the actions in the Climate Plan. Moving forward with many actions, not just a few. Be open about challenges.

#### Technical Information



#### How would you like to see equity addressed in the climate element?

It is not equitable to zone areas for housing or to place low income housing where the people who live there cannot walk or cycle for their needs. Denser areas of housing mean that fire, utilities, mail, deliveries, police, etc. cost less to provide and can respond more efficiently.

Schools need to be located amongst the population who will attend the school. And those students should be able to walk to school.

This all points to stopping sprawl and developing as a close-knit denser community. That actually is more equitable for everyone.

Reduce future harm

#### What could the City do to improve your trust in it/them?

No responses

#### Have you felt distrust or a lack of transparency in any of your interactions with the City?

No responses

### Are there current community equity efforts you know about that can be built upon for climate action?

No responses

# Are there communities in the city you are particularly concerned about regarding climate change impacts? If so, who are those communities?

Young people who will inherit the world in the condition we leave it.

Poor and working class folks

Tumwater has a significant elderly population who are vulnerable to heat-related illness and many of whom depend on transit or pedestrian routes. Tumwater needs a complete non-motorized network with good tree canopies.

### **Closing Survey**

## If you have any questions or comments related to the Comprehensive Plan Update and/or Climate Element for City staff, please provide them below.

What is going to happen to the old brewery project when the Deschutes returns to an estuary, tides reach up the river, and sea level continues to rise?

What are you doing to change business as usual to reduce GHG's, increase HOV's reduce water usage, replant forests that are burning up releasing more carbon into the air?

## Appendix C Index of Equity-Focused Actions

### **Overarching Goals**

Goal	CL-1	Ensure 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.			





Policy	CL-1.1	Conduct intentional outreach with frontline communities to create opportunities for equitable engagement in climate adaptation, mitigation, and education.		
Action	CL-1.1.1	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.		
Action	CL-1.1.2	Create and implement tailored outreach and education initiatives that will empower frontline communities to respond to climate change threats.		
Action	CL-1.1.3	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.		
Action	CL-1.1.4	Conduct outreach and listening sessions in frontline communities to understand existing needs and opportunities and to educate on projected climate impacts.		
Policy	CL-1.2	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.		
Action	CL-1.2.1	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.		
Action	CL-1.2.2	Plan and conduct community engagement activities to ensure all policies and tasks are co-created with the community and to share new plan information		
Dalian	Cl 1 2	upon completion and update throughout implementation.		
Policy	CL-1.3	Develop programs and resources to promote equitable financial access to climate resilience and mitigation activities.		
Action	CL-1.3.1	Identify funding sources for subsidies for overburdened communities to offset		
71001011	02 2,0,2	costs associated with climate impacts and mitigation actions. Covered funding		
	could include potential cost increases associated with changing to no			
		fuel energy sources, increased energy usage to maintain livable indoor		
		temperatures, and home hardening projects.		
Action	CL-1.3.2	Establish and initiate a process to consult with frontline communities to identify		
		ways to equitably distribute climate funding.		
Policy	CL-2.2	Develop a program funding strategy to support equitable access to climate		
		mitigation and adaptation programs developed by the City.		
Action	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.		





Action	CL-3.1.2	Utilize community outreach efforts (see policies CL-1.1, CL-1.2) to discuss
		community climate impacts and work with any community groups that desire
		additional adaptation or mitigation planning beyond existing city efforts.

### **GHG Sub-Element**

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.		
Action	CL-4.2.2	Require energy performance ratings and disclosures for rental dwelling units at times of application so that tenants are informed before making rental decisions.		
Action	CL-4.2.6	Require baseline levels of energy efficiency as part of building permit review.		
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.		
Action	CL-6.1.2	Promote biking, walking, and rolling by investing in accessible and attractive street-level elements per goals included in the Transportation Plan like seating, shaded sidewalks, ADA ramps, enhanced signals and crossings, and protected bike lanes.		
Action	CL-6.1.3	Develop 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 vehicles.		
Action	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.		
Action	CL-6.1.5	Reevaluate long term plans, such as the Transportation Plan and Capital Facilities Plan, and update to prioritize non-motorized transportation. Set goals and plans for shifting to non- motorized transportation, like developing car-free corridors in commercial and mixed-use areas to encourage mode shift.		
Action	CL-6.2.2	Provide educational resources for community members seeking to install EV chargers at home, with specific incentive support for smaller-scale and multifamily property owners.		
Action	CL-6.2.3	Explore more opportunities to expand the city's publicly available EV charging network.		
Policy	CL-7.2	Increase efficiency of the transportation system.		
Action	CL-7.2.4	Work with Intercity Transit to identify and implement programs that help		
		people move to and from transit, reduce GHG emissions, and use street-level improvements to connect neighborhoods without the population to support fixed routes transit options. Tumwater will engage homeowners' associations		





		for representation and feedback. Expansion of service will include an analysis of			
		climate impacts to ensure the program does not result in an increase in GHG			
		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.			
Action	CL-8.1.1	Adopt 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 overburdened			
		communities.			

### **Resilience Sub-Element**

Goal	CL-9	Ensure that buildings and energy infrastructure can accommodate renewable energy opportunities, keep the community safe, and can withstand and recover from extreme weather and natural hazards worsened by climate change.		
Action	CL-9.1.2	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.		
Action	CL-9.5.1	Establish partnerships with all regional energy utilities and develop short- and long-range plans to assess and mitigate the risk of climate hazard impacts on energy generation and transmission infrastructure.		
Goal	CL-10	Increase preparedness for acute climate impacts and improve the		
		resilience of Tumwater's people and systems against climate hazards.		
Action	CL-10.1.1	Partner with a philanthropic organization or 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.		
Action	CL-10.1.2	Transition management of the vulnerable population database to the City and secure long-term funding and staffing to keep the database up to date and oversee its use during emergencies.		
Action	CL-10.2.1	Implement the Thurston County Extreme Heat, Emergency Response, and Illness Prevention Plan.		





Action	CL-10.2.3	Assess potential partnerships with CBOs and regional agencies that can serve			
		as resilience hubs that provide resources such as heat pumps and emergency			
		supplies for community members to check out during emergencies.			
Action	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.			
Policy	CL-10.5	Improve community resilience, health equity, and environmental justice by			
		ensuring that all community members can walk or roll to public green spaces			
		within ½ a mile and connected by sidewalks or protected walkways.			
Action	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.			
Action	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.			
Policy	CL-10.8	Develop programs that enable and empower community members to protect			
		themselves from poor air quality.			
Action	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 from tools like EJScreen 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.			
Action	CL-10.8.2	Establish and maintain a stable funding source to distribute personal protective			
		equipment to populations vulnerable to poor air quality.			
Action	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.			
Policy	CL-10.9	Ensure community members have resources to shelter in place or to			
		adequately reach temporary shelter.			
Action	CL-10.9.1	Coordinate with other agencies and jurisdictions to provide more cooling			
		centers 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 the city,			
		with priority for opening locations near the highest concentrations of heat-			
		vulnerable residents.			
Action	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.			
Policy	CL-10.10	Increase language accessibility of emergency services, plans, and resources.			





Action	CL-10.10.1	Establish on-call contracts for language interpretation and translation services,		
		including ASL.		
Action	CL-10.10.2	Utilize on-call contracts for language services to translate all emergency		
		resources and 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.		
Policy	CL-11.1	Enhance partnership between the Tribes and the City, integrating Tribal		
		expertise, opinions, and values into climate planning efforts, projects, and		
		programs.		
Action	CL-11.1.1	In collaboration with the Tribes, establish guidelines and standards for		
		incorporating Traditional Ecological Knowledge into City programs and		
		planning efforts to adapt to climate change impacts.		
Action	CL-11.1.2	Integrate the Tribal Stewards Curriculum or an alternative approved by Tribal		
		representatives into regular City training schedules.		
Policy	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.		
Action	CL-11.2.1	Work with local partners, especially representatives of the Tribes, to establish		
		and sustain a native plant nursery and seed bank to support long-term		
		ecological restoration and ensure continued access to culturally significant		
		plants.		
Action	CL-11.2.2	In collaboration with the Tribes, identify consumptive and non-consumptive		
		resources that will be adversely impacted by climate change.		
Action	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.		
Policy	CL-11.3	Collaborate with the Tribes to ensure the preservation of archaeological sites		
		and traditional cultural properties that are vulnerable to climate impacts.		
Action	CL-11.3.1	Request recommendations from the Tribes for actions the City can take to		
		preserve historic sites and cultural properties.		
Action	CL-11.3.2	In collaboration with the Tribes, develop guidelines for protecting, enhancing,		
		and restoring affected historic sites and cultural properties.		
Action	, ,			
		the most recent UFMP. Prioritize implementation of UFMP actions that provide		
_		benefits for frontline communities.		
Goal	CL-13	Ensure that zoning and development decisions support compact urban		
		development, prevent displacement, and foster system-wide resilience,		
		including a resilient local economy.		
Policy	CL-13.1	Develop anti-displacement programs in overburdened communities when		
		increasing densities.		

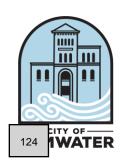


**Technical Information** 

Action	CL-13.1.1	Review existing anti-displacement and equity decision-making tools and use these to develop guidance specific to Tumwater for future housing and zoning decisions.	
Action	CL-13.1.2	Conduct extensive outreach activities in frontline communities at risk of displacement to collaboratively develop a set of anti-displacement strategies.	
Action	CL-13.1.3	Review land use maps and Comprehensive Vulnerability Assessment findings to identify regions at high-risk of disaster displacement such as barriers to rebuilding housing in high-risk areas and develop strategies in collaboration with impacted communities to develop solutions.	
Action	CL-13.2.4	Form partnerships with organizations that aid workers affected by climate change who are transitioning to new fields of employment to share their services with Tumwater community members.	
Policy	CL-13.3	Embed environmental justice in City land use decisions.	
Action	CL-13.3.1	Develop an Environmental Justice Audit process, using the State Department of Ecology guidance as well as US EPA guidance to inform Tumwater's audit process.	
Action	CL-13.3.2	Conduct a city-wide environmental justice audit prior to amending land use designations.	
Goal	CL-14	Ensure that the local transportation system, including infrastructure, routes, and non-motorized travel modes, fosters connectivity and can withstand and recover quickly from climate impacts.	
Action	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 established by CL-10.1.2.	
Goal	CL-15	Protect and improve water quality and availability.	
Action	CL-16.1.2	Identify relevant stakeholders who can further sustainable, climate-adapted, and equitable food distribution in Tumwater.	
Policy	CL-16.3	Expand consistent access to food for Tumwater community members.	
Action	CL-16.3.1	Coordinate with the County to expand access to food bank services.	
Action	CL-16.3.2	Conduct community outreach to find gaps and barriers in consistent access to nutritious food.	

# 2025 Comprehensive Plan Update Climate Change Element Resilience Sub-Element Review

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

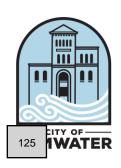


Alyssa Jones Wood, Sustainability Manager Planning Commission February 11, 2025

# Intent

Discuss the draft Resilience Sub-Element of the new Climate Change Element of the Comprehensive Plan





# **New State Climate Element Requirements**

- A climate mitigation sub-element to address actions to reduce overall greenhouse gas emissions and vehicle miles traveled
- 2. A **climate resilience sub-element** to address climate adaptation
- 3. Consideration of **environmental justice** to avoid worsening environmental health disparities



# **Community Engagement To-date**

- Continued participation from the Climate Policy Advisory Team (CPAT)
- Held in-person open house at ASHHO on August 14, 2024
  - About 60 participants
- Opened online open house from August 15 October 31, 2024
- Feedback provided by the Thurston Climate Mitigation Collaborative's Community Advisory Workgroup
- Meeting with Thurston Climate Action Team's Community Organizer
- Direct emails with Community Based Organizations, Non-Profits, interested community members, and Affinity Groups
- Tabled at the Thurston County Food Bank to encourage participation in online open house
- Presented to the South Sound Asian and Pacific Islanders Coalition twice
- The draft Climate Element was open for Public Comment online through January 31.
- Planning to table at the Thurston County Food Bank and Library in January to request participation in review/public comment of the draft Element
- Social media posts
- Forthcoming Community Assembly hosted by Thurston Climate Action Team







# Mitigation

# Adaptation



**Expand Multimodal** Transportation



Electrification & **Energy Efficiency** 



Reduce Vehicle Miles Traveled (VMT)



Protect Natural Carbon Sinks



Renewable Energy & **Onsite Storage** 



Protect & Expand Urban Canopy



Weatherize & Harden Homes & Infrastructure



Develop Densely and in Low Risk Areas



Improve & Restore **Habitat Connectivity** 

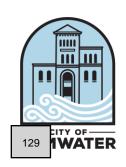


**Expand Access to** Local & Culturally 🚻 ន័ន័នី Significant Foods



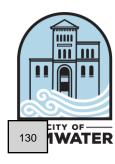
# **Key Terms**

- **Adaptation:** The process of adjusting to new climate conditions in order to reduce risks to valued assets
- Climate Resilience: The ongoing process of anticipating, preparing for, and adapting to changes in climate and minimizing negative impacts to our natural systems, infrastructure, and communities
- 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. 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.

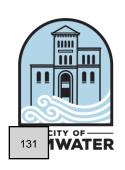


# **Climate Hazards**

	By 2100		
Climate Projection	Low emissions scenario	High emissions scenario	
Average summer temperature in June-August	↑ 5.4°F increase	↑ 9.5°F increase	
Summer maximum temperature	↑4.7	↑9.6	
Number of hot days (humidex over 90 degrees)	↑ 29.1 days	↑ 58.2 days	
Total annual precipitation	no data	↑ 5.1% increase	
Intensity of extreme rainfall events (change in the magnitude of 2-year storms)	no data	14% increase	
Percent change in the magnitude of 25-year storm	no data	↑ 25% increase	
Peak streamflow	↑ 15% increase	↑ 14% increase	
Return interval of 25-year peak streamflow	↓ 9.6 years	↓ 13.8 years	
Likely sea level rise	↑ 2.17 ft. increase	↑ 2.67 ft. increase	
Change in high fire danger days	↑7 days (by 2040)	10 days (by 2040)	
Precipitation drought (likelihood of a year with summer precipitation below 75% of historical normal)	no data	↑ 38% increase	
Total late summer precipitation July-September	no data	↓ 22% decrease	
Percent change in April 1 snowpack	no data	↓ 100% decrease	



- Do you have any general or specific comments that you'd like to share under this Goal?
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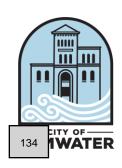
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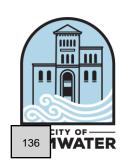
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# **Comments and Contact Information**

Written comments are welcome at any time during the periodic update process and staff will address and publish all formal comments

City of Tumwater Contact:

Brad Medrud, AICP

City of Tumwater Deputy Community Development Director

Community Development Department

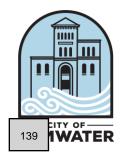
555 Israel Road SW

Tumwater, WA 98501

Phone: 360-754-4180

Email: bmedrud@ci.Tumwater.wa.us

The periodic update email is <a href="mailto:compplan@ci.Tumwater.wa.us">compplan@ci.Tumwater.wa.us</a>



All documents related to the periodic update will be located on the <u>City's</u> <u>periodic upgrade webpage</u>



# Questions?

ajoneswood@ci.Tumwater.wa.us & compplan@ci.Tumwater.wa.us