

PLANNING COMMISSION MEETING AGENDA Monday, May 19, 2025, at 7:00 PM Snoqualmie City Hall, 38624 SE River Street & Zoom

COMMISSIONERS

Chair: Andre Testman Vice Chair: Ashleigh Kilcup Commissioners: Simon Hurley, Darrell Lambert, Luke Marusiak, Dan Murphy, and VACANT.

This meeting will be conducted in person at Snoqualmie City Hall and remotely using Zoom.

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Press *9 to raise your hand to speak. Raising your hand signals the meeting moderator that you have a comment. Press *6 to mute and unmute.

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CALL TO ORDER & ROLL CALL

PUBLIC HEARING

1. Overlay Zones Color Palette

PUBLIC COMMENT

Public comment will be accepted by in-person attendees. Remote attendees may submit written comments to the <u>staff liaison</u> or <u>city clerk</u>.

AGENDA APPROVAL

COUNCIL LIAISON REPORT

OLD BUSINESS

2. Draft Climate Element

OTHER BUSINESS

Items of Planning Commissioner Interest

Upcoming Schedule

ADJOURNMENT



Community Development Department

38624 SE River Street | P.O. Box 987 Snoqualmie, Washington 98065 (425) 888-5337 <u>www.snoqualmiewa.gov</u>

MEMORANDUM

То:	Planning Commission
From:	Mona Davis, Community & Economic Development Director
	Andrew Love, Contract Planner
Date of Memo:	May 13, 2025
Date of Meeting:	May 19, 2025
Subject:	Snoqualmie Color Palette (Chapter 17.35 SMC)

INTRODUCTION:

City staff have been tasked with updates to the color palette. Currently, Chapter 17.35 of the Snoqualmie Municipal Code (SMC) requires historical design review for the City's "historic district overlay zones," "downtown historic commercial landmark district," and individual landmarks.

Type I projects are administrative and can include "exterior painting of **noncontributing** buildings or structures [in the overlay zones and/or landmark district], **using approved colors**" (SMC 17.35.120(A)(2)).

Type II projects are reviewed by the historic preservation officer, who makes a staff report and recommendation to the Historical Design Review Board (which the Planning Commission has been serving as for many years). A Type II project can include the following:

- "For contributing buildings or structures [in the Landmark District or individual Landmarks], any alteration in exterior appearance or replacement of historic materials with nonhistoric materials" (SMC 17.35.120(B)(1).
- "For **noncontributing** buildings or structures [in the overlay zones and/or landmark district], any exterior repairs (other than emergency repairs needed for the immediate protection of property, life or safety) or alterations other than those designated as Type I" (SMC 17.35.120(B)(2).

Previously, the city has heard frustration from the business owners over the limited color palette based on the expense and lengthy process to seek a variance from these standards.

BACKGROUND:

- On February 3, 2025, City staff brought a memorandum to Planning Commission seeking feedback on potential updates to the City's historic overlay color palette.
- On April 7, 2025, City staff presented potential options for updating the color palette and posed several questions for discussion. Some communities like the City of Orting maintained strict color options, whereas other cities like Burien, Carnation, and Gig Harbor have more general guidelines. In Carnation's case, there is a chart outlining which types of colors are allowed without prescribing certain shades.
- On April 21, 2025, staff provided the Planning Commission a wide range of colors from the two historic paint collections mentioned above, but it was determined that it would be better to return with only the Orting colors (which include 24 out of 60 colors in the Sherwin-Williams Historical Color Collection) and the currently approved Snoqualmie color palette (which feature 16 colors, with limitations on mixing and matching).
- On May 5, 2025, King County Historic Preservation came to present and also later gave feedback on the color palette issue. In addition, two other members of the public gave input as did Councilmember Jo Johnson. After a lengthy discussion of options and weighing pros and cons, the Planning Commission gave guidance on what to have ready for the Planning Commission for the Public Hearing.

Attachment 1 includes the colors from both attachments of the last meeting, which was framed as option #3 (keep current Snoqualmie color palette with option to mix and match *and* add the 24 identified Sherwin-Williams options). Exact paint chip samples may differ than what is displayed on screen or printed.

Attachment 2 provides an example of what a less stringent color palette could look like, where certain color families are allowed or prohibited, based on whether it is a main color, trim, or accent. This is just a starting point to facilitate discussion and consideration during the public hearing, and revisions would likely be required if the Planning Commission prefers this approach.

Lastly, **Attachment 3** provides example language that could supplement the color guidelines if Planning Commission prefers that approach (for example, Attachment 3 would provide additional context when selecting colors).

NEXT STEPS:

Depending on feedback from the Planning Commission and what we hear in the Public Hearing, staff will prepare an updated color palette exhibit and bring it back to Planning Commission to obtain a recommendation to City Council. Currently, SMC 17.35.040(C) defines an approved color as "a color from a palette approved by the historic design review board and maintained on file by the historic preservation officer." The color palette will be brought to the Community Development Committee before City Council.

Code amendments to Chapter 17.35 will be done separately, as additional research and coordination is needed, in addition to draft a non-project SEPA checklist and sending the revisions to Commerce for 60-day review.

ATTACHMENTS:

- 1. Draft Figure existing Snoqualmie color palette with the added Sherwin-Williams color options (from the City of Orting)
- 2. Draft Figure acceptable building color examples
- 3. Example language to potentially supplement figure of acceptable building colors

				Item 1.
Renwick Rose Beige (SW 2804) RGB: 175, 136, 113 Hex Value: #AF8871	Rookwood Terra Cotta (SW 2803) RGB: 151, 88, 64 Hex Value: #975840	Rookwood Red (SW 2802) RGB: 98, 47, 45 Hex Value: #622F2D	Rookwood Dark Red (SW 2801) RGB: 75, 41, 41 Hex Value: #4B2929	Rookwood Amber (SW 2817) RGB: 192, 134, 80 Hex Value: #C08650
Renwick Beige (SW 2805) RGB: 195, 176, 157 Hex Value: #C3B09D	Rookwood Brown (SW 2806) RGB: 127, 97, 74 Hex Value: #7F614A	Rookwood Medium Brown (SW 2807) RGB: 110, 82, 65 Hex Value: #6E5241	Rookwood Dark Brown (SW 2808) RGB: 95, 77, 67 Hex Value: #5F4D43	Rookwood Antique Gold (SW 2814) RGB: 165, 130, 88 Hex Value: #A58258
Rookwood Jade (SW 2812) RGB: 151, 159, 127 Hex Value: #979F7F	Rookwood Blue Green (SW 2811) RGB: 115, 132, 120 Hex Value: #738478	Rookwood Sash Green (SW 2810) RGB: 80, 106, 103 Hex Value: #506A67	Rookwood Shutter Green (SW 2809) RGB: 48, 59, 57 Hex Value: #303B39	Rookwood Dark Green (SW 2816) RGB: 86, 92, 74 Hex Value: #565C4A
Downing Straw (SW 2813) RGB: 202, 171, 125 Hex Value: #CAAB7D	Downing Slate (SW 2819) RGB: 119, 127, 134 Hex Value: #777F86	Downing Earth (SW 2820) RGB: 136, 123, 103 Hex Value: #887B67	Downing Stone (SW 2821) RGB: 166, 163, 151 Hex Value: #A6A397	Downing Sand (SW 2822) RGB: 203, 188, 165 Hex Value: #CBBCA5
Renwick Golden Oak (SW 2824) RGB: 150, 114, 76 Hex Value: #96724C	Renwick Heather (SW 2818) RGB: 139, 125, 123 Hex Value: #8B7D7B	Renwick Olive (SW 2815) RGB: 151, 137, 106 Hex Value: #97896A	Rookwood Clay (SW 2823) RGB: 154, 126, 100 Hex Value: #9A7E64	Decatur Buff (BM HC-38) RGB: 193, 167, 125 Hex Value: #C1A77D
Navajo White (BM OC-95) RGB: 238, 231, 213 Hex Value: #EEE7D5	Newburyport Blue (BM HC-155) RGB: 70, 85, 102 Hex Value: #465566	Edgecomb Gray (BM HC-173) RGB: 217, 211, 196 Hex Value: #D9D3C4	Yorktowne Green (BM HC-133) RGB: 70, 90, 93 Hex Value: #465A5D	Cromwell Gray (BM HC-103) RGB: 127, 119, 102 Hex Value: #7F7766
Sail Cloth (BM OC-142) RGB: 228, 222, 206 Hex Value: #E4DECE	Kendall Charcoal (BM HC-166) RGB: 103, 102, 98 Hex Value: #676662	Ozark Shadows (BM AC-26) RGB: 182, 180, 172 Hex Value: #B6B4AC	Hampshire Gray (BM HC-101) RGB: 144, 137, 114 Hex Value: #908972	Lancaster Whitewash (BM HC-174) RGB: 230, 225, 203 Hex Value: #E6E1CB
Hodley Red (BM HC-65) RGB: 119, 77, 74 Hex Value: #774D4A NOTE: SW = Sherwin-Willia	Essex Green (BM HC-188) RGB: 39, 54, 46 Hex Value: #27362E ums; BM = Benjamin Moore	Night Horizon* (BM 2134-10) RGB: 75, 67, 61 Hex Value: #4B433D	Black Satin* (BM 2131-10) RGB: 49, 52, 53 Hex Value: #313435	Black* (BM 2132-10) RGB: 49, 49, 50 Hex Value: #313132 5



NATURAL MATERIALS SUCH AS BRICK, STONE, AND STAINED WOOD ARE ALWAYS APPROPRIATE. HOMEOWNERS AND BUSINESSOWNERS ARE ENCOURAGED TO NOT PAINT BRICK.

Example Language to Supplement Color Palette

- A. Muted and dark saturated colors, browns, grays, whites, or other neutral colors shall be utilized for the primary background of buildings/building shell.
- B. Extremely dark colors and pastels shall be limited to trim and accents, generally no more than 10 percent of the façade.
- C. Bright, neon, fluorescent, or day-glow colors of any shade are prohibited.
- D. Contrasting colors should be utilized for trim. For example, where a dark background color is used for the shell of the building, white trim works particularly well. Darker trim colors can be effective where lighter colors are used for the basic building shell. Consideration should be given to contrasting the colors of new or remodeled buildings with the colors of the existing buildings in its vicinity.
- E. Avoid painting factory colors of stone and brick. Stone and brick provide naturally durable colors and finishes that would be lost or damaged if painted. Painting or staining of stone and brick is prohibited.
- F. All finished natural wood tones are permitted.
- G. *Exception:* If a historic color is found to have been used on an individual Snoqualmie Landmark or a contributing building within the Landmark District through the use of laboratory testing, this color shall be permitted in a similar manner.

Memorandum

То:	Snoqualmie Planning Commission
From:	Chris Green, Consultant Project Manager, Otak Cristina Haworth, Senior Planner, Otak
Copies:	Mona Davis, City of Snoqualmie
Date:	May 13, 2025
Subject:	Review of Draft Goals and Policies for the Climate Resilience and Greenhouse Gas Emissions Reduction Sub-Elements
Project No.:	32703.W

The May 19 workshop will continue Planning Commission's review of materials for the Climate Element, focusing on draft goals and policies for two required sub-elements: Climate Resilience and Greenhouse Gas (GHG) Emissions Reduction. These sub-elements are mandated under HB 1181 and reflect the City's efforts to address both climate adaptation and mitigation as part of its 2025 Comprehensive Plan update.

Workshop Objectives

- Review and provide feedback on draft goals and policies for the Climate Resilience Sub-Element and the GHG Emissions Reduction Sub-Element.
- Discuss alignment with Snoqualmie's existing plans and planning priorities.
- Prepare for refinement of the draft Climate Element in upcoming meetings.

Background

At its May 5 meeting, the Planning Commission received a brief overview of the draft goals and policies. The Climate Policy Advisory Team (CPAT) provided more detailed feedback on these materials during its May 9 meeting. Comments and recommendations from both groups will help shape the next draft of the full Climate Element, which is scheduled for review at workshops on June 2 and June 16.

In addition to the goals and policies, this workshop packet includes the Draft Greenhouse Gas Emissions Inventory Report prepared by Cascadia Consulting Group and King County's K4C program. This inventory establishes a baseline for local emissions and informs the development of reduction targets and policy priorities.

Resilience Sub-Element

Snoqualmie's resilience planning is focused on four priority climate-related hazards: extreme heat, extreme precipitation and flooding, drought, and wildfire/smoke. Reduced snowpack is addressed as part

of drought-related impacts. Sea level rise is not a hazard of concern for Snoqualmie due to the city's inland location.

The draft goals and policies emphasize strengthening local capacity to prepare for and respond to climate-related hazards, with particular attention to community assets and vulnerable populations. Key themes include:

- Reducing exposure through land use and infrastructure planning.
- Increasing the resilience of the built environment and public facilities.
- Supporting equitable emergency preparedness and response systems.
- Preserving and restoring ecosystems that provide climate resilience benefits, including forested areas and riparian corridors.

These draft policies draw from guidance in the Department of Commerce's Climate Element Planning resources and have been customized to reflect Snoqualmie's specific vulnerabilities and planning context.

Greenhouse Gas Emissions Sub-Element

This workshop packet also includes the Draft Greenhouse Gas Emissions Inventory Report, based on 2022 and 2023 data. The summary memo focuses on 2023 as the baseline year for emissions tracking. The inventory was prepared by Cascadia Consulting Group and King County's K4C program.

The GHG Emissions Reduction Sub-Element focuses on local actions under the City's land use and transportation planning authority. The goals and policies emphasize:

- Energy-efficient development patterns that support compact, mixed-use, and transit-accessible neighborhoods.
- Reduction in vehicle miles traveled (VMT) through coordinated land use and transportation strategies.
- Opportunities for carbon sequestration in natural systems, such as forests and wetlands.

While some large emission sources (e.g., aviation) are outside local control, the draft policies focus on areas where Snoqualmie can make meaningful progress toward reducing emissions. The goals were selected and adapted from Commerce's *Climate Policy Explorer* and tailored to the city's land use and transportation context.

Next Steps

Following this workshop:

- The goals and policies will be refined based on input from the Planning Commission and CPAT.
- The revised draft Climate Element, incorporating updated goals and policies, will be reviewed at the Commission's June 2 and June 16 workshops.

• Adoption of the final Climate Element will occur alongside the full Comprehensive Plan update

Attachments:

- 1. DRAFT Greenhouse Gas Emissions Inventory Report
- 2. DRAFT Resilience Goals and Policies
- 3. DRAFT Greenhouse Gas Emissions Reduction Goals and Policies



CITY OF SNOQUALMIE

APRIL 2025

PREPARED BY CASCADIA CONSULTING GROUP



DRAFT GHG Emissions Report Contents

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Introduction

Background

As part of the King County – Cities Climate Collaboration (K4C), the city of Snoqualmie has committed to reducing greenhouse gas (GHG) emissions within its community and building resiliency to climate change effects. The following report provides a summary of current communitywide greenhouse gas emissions for Snoqualmie in 2022 and 2023 and compares these totals to 2019. The city of Snoqualmie's communitywide greenhouse gas inventory is a critical step in understanding the past, current, and future GHG emissions to effectively reduce GHG emissions. Greenhouse gas analyses allow jurisdictions to better understand their greenhouse gas emissions trends over time and prioritize engagement with community and implementation activities on the largest sources of emissions. This summary is intended to provide insight into the sources of the city of Snoqualmie's greenhouse gas emissions, highlighting key areas where emission reductions are needed.

Methodology

Snoqualmie's GHG emissions inventory was performed using guidance from the U.S. Community *Protocol for Accounting and Reporting of GHG Emissions* (USCP).¹ This protocol is the industry standard for quantifying emissions produced by the activities of Snoqualmie's residents, businesses, and visitors. Snoqualmie's communitywide emissions were quantified for the 2022 and 2023 calendar year and compared to 2019 GHG emissions calculated through the Puget Sound Regional Emissions Analysis.

Emission sources included in the K4C GHG inventories include energy, transportation, solid waste, and fugitive emissions. These sectors are aligned with recommended protocols and industry best practices. This inventory represents emissions occuring as a result of the activities of the city of Snoqualmie's residents, employees, and visitors. This inventory is not intended to represent the City's municipal operations carbon footprint.

¹ US Community Protocol | ICLEI USA.



Inventory Findings & Trends

Inventory Findings & Trends

Communitywide GHG Emissions

In 2022 and 2023, the city of Snoqualmie community produced an estimated 126,233 and 122,985 metric tons of CO₂ emissions (MTCO₂e), respectively. The community's largest sources of emissions as of the 2023 communitywide GHG inventory came from the built environment and transportation & other mobile sources sectors. The largest emission sources included electricity (25%), aviation (24%), and natural gas (23%). Since 2019, overall communitywide emissions in Snoqualmie have decreased by 9%. A detailed summary of emissions can be found in Figure 1 and Table 1.

In addition, Table 1 reports "core" emissions sources, emissions produced by sectors commonly included in community greenhouse gas inventories. Core emission sources are sources which city governments typically have the most influence over (e.g., through local policy mechanisms such as local codes/regulations). Core emissions in this inventory include electricity, natural gas, on-road vehicles, and solid waste generation and disposal.



Figure 1. Total communitywide GHG emissions profile (MTCO₂e).



Inventory Findings & Trends

	2019	2022	2023	2023 % of		2023
	Emissions	Emissions	Emissions	Total	2019 to 2023	Per-Capita
GHG Emissions Sector	(MTCO₂e)	(MTCO₂e)	(MTCO₂e)	Emissions	% Change	(MTCO₂e)
Built Environment	73,985	67,205	61,143	50%	-17%	4.2
Electricity	48,116	36,192	30,135	40%	-37%	2.1
Natural Gas	23,909	28,156	28,098	37%	+18%	1.9
Propane	983	1,038	1,016	1%	+3%	<1
Fuel Oil	978	1,818	1,894	2%	+94%	<1
Industrial Processes	N/A	N/A	N/A	0%	N/A	0
Transportation	51,953	48,691	51,622	42%	-<1%	3.6
On-Road Vehicles	15,403	13,895	15,785	21%	+2%	1.1
Non-Road Equipment	6,239	6,716	6,776	9%	+9%	<1
Aviation	30,312	26,029	29,061	38%	-4%	2.0
Solid Waste	2,563	2,389	2,267	2%	-12%	<1
Landfill	2,271	2,066	1,957	3%	-14%	<1
Compost	292	310	310	<1%	+6%	<1
Process & Fugitive Emissions	7,271	7,948	7,953	6%	+9%	<1
Refrigerants	7,271	7,948	7,953	6%	+9%	<1
Total Emissions	135,772	126,233	122,985	100%	-9%	8.5
Core Emissions	89,990	82,684	76,286	62%	-15%	5.3

Table 1. Total communitywide GHG emissions, by sector (MTCO₂e).



Wastewater



Other Mobile Sources



Built Environment



The built environment sector includes emissions from the consumption of **electricity, natural gas, and other fuel sources (fuel oil and propane)** within residential, commercial, and industrial buildings. The built environment sector made up 50% of Snoqualmie's 2023 communitywide emissions. A detailed overview of emissions from these sources is provided below.

SUMMARY

- Since 2019, Snoqualmie's built environment emissions have decreased by 17%. The largest change to built environment emissions came from the industrial sector, in which emissions decreased by 38%.
- Emissions from electricity consumption accounted for 40% of Snoqualmie total communitywide GHG emissions in 2023, which has decreased by 37% since 2019.
- Natural gas accounted for 28,098 MTCO₂e in 2023, making up 37% of Snoqualmie total communitywide GHG emissions, which increased by 18% since 2019.
- Fuel oil and propane emissions in 2023 made up 2% and 1% of 2023 emissions, which increased by 94% and increased by 3% since 2019.



Figure 3. Total energy emissions trends by year.



Transportation



The transportation sector includes emissions from communitywide transportation mobile sources including **on-road vehicles, non-road equipment, and aviation**. The transportation sector made up 42% of Snoqualmie's 2023 communitywide emissions. A detailed overview of emissions from these sources is provided below.

SUMMARY

- Since 2019, transportation emissions have decreased by <1%.
- On-road vehicles which include passenger vehicles, freight, and service vehicles (heavy, medium, and light vehicles) represent 21% of Snoqualmie's 2023 communitywide GHG emissions, which increased by 2% since 2019.
- Non-road equipment—which includes recreational, construction, industrial, lawn/garden, agriculture, commercial, logging, airport support, oil field, pleasure craft, and railroad related equipment—made up 9% of Snoqualmie 2023 communitywide GHG emissions, which increased by 9% since 2019.
- Aviation emissions account for estimated fuel consumption from Seattle-Tacoma International Airport (SeaTac) by Snoqualmie residents. Aviation emissions accounted for 38% of Snoqualmie's 2023 communitywide GHG emissions, which decreased by 4% since 2019.







Solid Waste



Emissions from the solid waste sector include emissions produced from the **generation, transportation, and disposal** of landfilled and composted waste produced within Snoqualmie. The solid waste sector made up 2% of Snoqualmie's 2023 communitywide emissions. A detailed overview of emissions from these sources is provided below.

SUMMARY

- In 2023, solid waste accounted for 2% of communitywide emissions, which decreased by 12% since 2019.
- Emissions from landfill accounted for 3% of those emissions, while emissions from compost made up <1%, which decreased by 14% and increased by 6% since 2019.

Process & Fugitive Emissions



Greenhouse gas emissions can also stem from leaks from contained sources, such as from refrigeration and industrial equipment. This inventory estimated emissions from leakage of potent greenhouse gases from refrigerants used in buildings and vehicles.

SUMMARY

• Refrigerants emissions made up an estimated 6% of 2023 communitywide emissions in Snoqualmie—from leakage of hydrofluorocarbons (HFCs) and HFC substitutes used for cooling and refrigeration, which increased by 9% since 2019.



DRAFT GHG Emissions Report

Key Terms

Key Terms

Table 2. Glossary of key terms in GHG analysis.

Term	Description
Activity data	Data on the magnitude of human activity resulting in emissions taking place during a given period of time. Data on energy use, fuel use, miles traveled, input material flow and product output are all examples of activity data that might be used to compute GHG emissions.
Base year	A specific year against which an entity's emissions are tracked over time.
CO₂ equivalent (CO₂e)	The universal unit for comparing emissions of different GHGs expressed in terms of the global warming potential of one unit of carbon dioxide.
Emission factor	A unique value for determining an amount of a GHG emitted on a per unit activity basis (for example, metric tons of CO2 emitted per million Btus of coal combusted, or metric tons of CO2 emitted per kWh of electricity consumed).
Fugitive emissions	Emissions that are not physically controlled but result from the intentional or unintentional release of GHGs. They commonly arise from the production, processing, transmission, storage and use of fuels or other substances, often through joints, seals, packing, gaskets, etc. Examples include hydrofluorocarbons from refrigeration leaks, SF6 from electrical power distributors and CH4 from solid waste landfills.
Greenhouse gases (GHGs)	Defined in the Local Government Operations Protocol as GHGs are the six gases identified in the Kyoto Protocol: carbon dioxide (CO2), nitrous oxide (N2O), methane (CH4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6).
Inventory	A comprehensive, quantified list of an organization's GHG emissions and sources.
Kilowatt hour (kWh)	The electrical energy unit of measure equal to one thousand watts of power supplied to, or taken from, an electric circuit steadily for one hour. (A Watt is the unit of electrical power equal to one ampere under a pressure of one volt, or 1/746 horsepower.)
Metric ton (MT, ton)	Common international measurement for the quantity of GHG emissions, equivalent to about 2,204.6 pounds or 1.1 short tons.



DRAFT GHG Emissions Report

Key Terms

Term	Description
Natural gas	A naturally occurring mixture of hydrocarbons (e.g., methane, ethane or propane) produced in geological formations beneath the earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions.
Protocol	A defined methodology for calculating and reporting GHG emissions.
Stationary combustion	Emissions from the combustion of fuels to produce electricity, steam, heat or power using equipment (boilers, furnaces, etc.) in a fixed location.
Therm	A measure of one hundred thousand Btu.



Appendix: K4C GHG Inventory Methodology

Appendix: K4C GHG Inventory Methodology

Calculating Snoqualmie's GHG emissions inventories involved identifying and applying emissions factors to activity data, summarized in Table 2 and detailed in the following sections:

- Activity data quantify levels of activity that generate GHG emissions, such as vehicle miles traveled, and kWh of electricity consumed.
- Emission factors (EFs) translate activity levels into emissions (e.g., MTCO₂e per kWh).

Sector Activity Data		Emissions Factors (EFs)
Transportation		
On-road vehicles	Vehicle miles traveled data and estimated emissions from Puget Sound Regional Council (PSRC)	U.S. Environmental Protection Agency (EPA) Emission Factors Hub ² vehicle EFs (by vehicle & fuel type)
Non-road equipment	EPA Motor Vehicle Emission Simulator (MOVES) model outputs for King County	N/A (data reported in emissions)
Aviation	Two approaches, depending on data availability: 1) Volume of fuel (jet-A and aviation gasoline) loaded onto all planes departing from airports within county; volume of all fuel used in helicopters, light aircraft operating within county boundaries (e.g., police, sightseeing, training) 2) Number of landing and takeoff cycles that could be used to estimate fuel based on similar airports Emissions from Seattle-Tacoma International Airport (SEA) were attributed to individual counties using Approach 1 (described above), in combination with passenger survey data, population, and household income data from the U.S. Census.	U.S. EPA EF Hub average emission factors, by fuel type
Built Environment		
Electricity	City-specific consumption provided by utilities	 Utility-specific emission factors (from Department of Ecology Clean Fuel Standard program utility-specific electricity calculations) Emissions & Generation Resource Integrated Database (eGRID) EFs (for informational purposes only)
Natural gas	City-specific consumption provided by utilities	Utility-specific emission factors (from Department of Ecology Clean Fuel

Table 2. Key approaches and data sources for city GHG emissions inventories.

² EPA Emission Factors Hub



DRAFT GHG Emissions Report

Appendix: K4C GHG Inventory Methodology

Sector	Activity Data	Emissions Factors (EFs)
		Standard program utility-specific electricity calculations)
Fuel oil	WA fuel oil consumption by sector from U.S. Energy Information Administration (EIA)	U.S. EPA EF Hub average EFs
Propane	WA propane consumption by sector from U.S. EIA	U.S. EPA EF Hub average EFs
Industrial	EPA Facility Level Information on Greenhouse	N/A - data reported in terms of
processes	Gases Tool	emissions
Solid Waste		
Solid waste generation & disposal	City-specific tonnage and King County waste characterization data	EPA Waste Reduction Model (WARM) EFs, customized for landfill attributes.
Compost generation & disposal	City-specific tonnage and King County waste characterization data	EPA WARM EFs
Refrigerants		
Refrigerants	EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks	N/A - reported in terms of emissions



Policy ID	Policies	This Might Look Like
GOAL 1	Enhance emergency preparedness, response, and recovery	efforts to mitigate risks and impacts associated with
	extreme weather and other hazards v	worsened by climate change.
1.1	Analyze how the municipal water system maintains adequate pressure during a major wildfire event and how it will look under current and projected drought conditions.	Hire a consultant to perform specialized modeling (e.g., for the water system).
1.2	Support the development of community wildfire protection plans.	and/or smoke planning projects. This may overlap to some degree with the Jurisdictional Annex to the
1.3	Develop and implement notification alerts within the community to the reduce risk exposure to wildfire smoke and particulate matter.	Regional Hazard Mitigation Plan.
1.4	Partner with residents, emergency management officials, the Puget Sound Clean Air Agency, and other stakeholders to develop and implement a wildfire smoke resilience strategy.	Alertus. Dedicate funding to plan/strategy implementation actions.
1.5	Develop and distribute educational materials that empower individuals to be prepared for potential disasters.	Tailor and adopt the Model Recovery Ordinance.
1.6	Adopt a pre-event disaster recovery ordinance to facilitate recovery through planned outcomes and governance	
GOAL 2	Ensure that public and private development, redevelopment	, infrastructure, and facilities projects are resilient to
	climate cha	nge.
2.1	Establish or maintain development regulations that incorporate best practices for reducing the risk of wildfire, extreme heat, flooding, and other climate-exacerbated hazards.	Adopt and/or maintain regulations for the following: floodplain management, Firewise practices or WUI management, green buildings, solar- or other alternative energy-readiness requirements, drought-tolerant
2.2	Reduce residential development pressure in the wildland-urban interface.	landscaping, etc.
2.3	Acquire properties or easements on properties that are vulnerable to climate-exacerbated hazards and are or will become unsuitable for development.	expand emergency response/evacuation options. Consider redundancy in the provision of infrastructure and services.
2.4	Ensure that the local transportation system (infrastructure, routes, and travel modes) is able to withstand and recover quickly from the impacts of extreme weather events and other hazards exacerbated by climate change.	Reduce density in the wildland-urban interface and increase density in more urban areas to accommodate growth allocations while reducing risk.
2.5	Improve street connectivity and multimodal transportation options, including sidewalks and street crossings, to serve as potential evacuation routes.	Purchase properties at extreme or significant risk of wildfire or flooding related property damage. Invest in more nonmotorized networks, prioritizing
2.6	Ensure that all community members have equitable access to green space within a half-mile.	missing connections. Coordinate with transit agencies to expand service, and
2.7	Develop and implement an urban heat resilience strategy that includes land use, urban design, urban greening, and waste heat reduction actions.	facilitate the expansion as needed with infrastructure improvements.

GOAL 3	Ensure the protection and recovery of ecosystems, including streams, riparian zones, wetlands, and floodplains, to			
	provide healthy habitats and waters	sheds in a changing climate.		
3.1	Implement actions identified in restoration and salmon recovery plans to improve the climate resilience of streams and watersheds and to protect and restore watershed-scale processes.	Proactively restore public lands by removing invasive species and replanting with drought-tolerant and pest-resistant native or naturalized species.		
3.2	Improve ecosystem health and climate resilience of aquatic and riparian habitats by reducing the threat of aquatic invasive species (e.g., fish, plants, invertebrates), protecting and restoring riparian vegetation and wetlands, and restoring the structure and function of streams and floodplains.	Require or incentivize redevelopment to reconnect stream, wetland, riparian, and/or floodplain habitat, where present. Require or incentivize redevelopment to restore habitats.		
3.3	Increase aquatic habitat resilience to low summer flows by increasing water residence time, storing water on the landscape, conserving water, protecting groundwater, keeping waters cool, and protecting water quality.	Prohibit new development from fragmenting streams, wetlands, riparian corridors, and/or floodplains. (NOTE: This is largely addressed in the CAO) Require stormwater plans to increase water residence		
3.4	Inventory climate refugia and habitat connectivity needs for species under stress from climate change, and identify opportunities to expand habitat protection and improve habitat quality and connectivity to foster climate resilience.	time (time spent on the ground/in the stream). Retrofit existing public spaces to retain water through landscape features and/or multiuse built features (flood storage in parking lots, for example).		
3.5	Review and update the Critical Areas Ordinance to address climate change, including: Ensuring setbacks for geologically hazardous (steep slopes and landslide hazard areas) are adequate so that improvements are not required to protect structures during their expected life.	Use staff or consultant resources to perform a desktop and/or field inventory of habitat conditions for stressed species. Use the inventory to identify additional areas for regulatory intervention.		
	Managing frequently flooded areas in the context of shifting streamflow patterns and extreme precipitation events.	Require Public Works projects to incorporate climate change considerations and fish passage improvements into water crossing (bridge and culvert) designs.		
	Consider climate stressors when determining allowed activities and uses within wetlands and Fish and Wildlife Habitat Conservation Areas (FWHCAs), and ensure regulations maintain habitat integrity and function.	Develop a preferred vegetation species list or other resource.		
	Incorporate post-wildfire debris flow and flooding hazard information into critical area delineations.			
	Ensure no net loss of ecosystem composition, structure, and functions, especially in Priority Habitats and Critical Areas, and strive for net ecological gain to enhance climate resilience.			
3.6	Incorporate hydrologic climate impacts into the design of water- crossing structures (i.e., climate-smart culverts and bridges) for fish passage and habitat quality.			
3.7	Prioritize the selection native or naturalized drought- and pest- resistant trees, shrubs, and grasses in public and private development projects and restoration efforts to support climate resilience.			

GOAL 4	Protect and enhance the climate resilience of urban forests	by implementing climate-smart forest management.
4.1	Reduce loss of private forestland through forest stewardship education, and identify opportunities to expand incentives for forest landowners to retain forestland and increase climate resilience of forests and streams.	Encourage participation in Washington's small forest landowner assistance cost-share and stewardship programs. Update the Snoqualmie Urban Forest Strategic Plan,
4.2	Periodically review and update the Snoqualmie Urban Forest Strategic Plan to maintain and expand tree canopy cover, improve tree and watershed health, prioritize carbon sequestration, consider the impacts of climate change, and build climate resilience.	potentially also convening a steering or advisory committee. Adopt City policies related to the use of Firewise or WUI standards in managing public urban forestry resources.
4.3	Manage tree canopy and forests to decrease climate-exacerbated risks from severe wildfires, protect residents, and improve ecosystem health and habitat.	Adopt City policies that prioritize the selection of drought- tolerant and pest-resistant native or naturalized species for trees in public places.
4.4	Prioritize urban forestry planning resources and funding for frontline communities that are hurt first and worst by climate change.	Develop a preferred vegetation species list or other resource.
4.5	Develop a program to analyze and address the climate impacts and risks of pests and disease on urban trees.	Educate City staff on the spread of invasive species, pests, and diseases in urban forest resources, including
4.6	Take early action to eliminate or control non-native invasive insect species that take advantage of climate change, especially where invasives threaten native species or ecosystem function.	hiring a professional to provide a report on vulnerability and risk in Snoqualmie. Lead or participate in regional efforts to mitigate invasive
4.7	Use an integrated approach to prevent the spread and establishment of invasive plant species and enhance the climate resilience of native plant communities.	Insect species. Develop a natural resource management plan that includes specific recommendations and/or
4.8	Create and support natural resource management plans that address existing stressors, consider climate change impacts, emphasize taking a precautionary approach to reduce risk of environmental harm, and guide adaptive management.	Implementation actions that will support a resilient urban forest.

GOAL 5	Ensure that cultural resources and practices – including significant historic sites and culturally important traditional foods and natural resources – are resilient to the impacts of extreme weather and other natural hazards worsened by climate change.		
5.1	Protect, enhance, and restore ecosystems in order to meet tribal treaty rights and conserve culturally important consumptive and non-consumptive resources including foods, medicinal plants, and materials that could be adversely impacted by climate change.	Identify culturally significant foods, medicinal plants, and materials and their typical range and/or habitat features, and develop a plan to ensure protection and enhancement of these areas for use by Tribes.	
5.2	Work with partners to establish and sustain a native plant nursery and seed bank to support long-term restoration and carbon sequestration efforts.	Hire a consultant and/or work with Tribes to identify culturally significant ad historic sites at risk from climate impacts, and develop specific strategies to protect those sites.	
5.3	Establish and maintain government-to-government relations with Native American tribes for the preservation of archaeological sites and traditional cultural properties that are vulnerable to climate impacts.	Lead or partner with Tribes to convert unused or underutilized public property into a native plant nursery. Coordinate with Tribes and local schools to steward the plants.	
5.4	Protect significant historic sites prone to floods or other hazards worsened by climate change.	Partner with the local library to retain a seed bank and/or seed library that Tribes and community members can contribute to and learn from.	
GOAL 6	Ensure that the local economy is resilient to climate disruption climate mitigation an	ns and fosters business opportunities associated with d adaptation.	
6.1	Support local businesses in planning for climate preparedness and continuity of operations.	Provide resources, such as training programs and education, for local business owners interested in planning for climate preparedness.	
GOAL 7	Advance environmental justice and community wellbeing decision-making, and access to healthy, res	by prioritizing equitable climate policies, inclusive ilient environments for all residents.	
7.1	Create and implement culturally contextualized outreach and education initiatives and materials that will inform the community about near-term and longer-term climate change threats and build resilience.	Develop focused outreach materials for vulnerable and sensitive populations (such as children, older adults, Native Americans, people with medical conditions that can be exacerbated by smoke or particulate matter, people with disability, etc.), people with property at risk	
7.2	Build and support partnerships with community-based organizations with the capacity and relationships to convene diverse coalitions of residents and to educate and empower them to implement climate resilience actions.	from climate change, and others, and proactively distribute them. Provide personal protective equipment and filter fans for	
7.3	Support wildfire smoke mitigation and incentivize infrastructure updates for facilities that serve high-risk populations.	at-risk individuals. Fund HVAC updates and/or MERV 13 filters for air intake for facilities such as healthcare clinics, senior housing, and childcare facilities.	

GOAL 8	Build organizational capacity and integrate climate resilience	across City systems and decision-making processes.
8.1	Train city staff in skills related to climate change and environmental justice to improve implementation, equity, and resilience, such as evacuation planning and wildfire resilience and regulatory tools	Pay for training and upskilling for administrative, emergency services, planning, and customer-facing staff to more fully understand climate change science, likely impacts, resilience strategies, and emergency management/response. Proactively collect data after hazard events and regularly analyze the event and the community's performance. Participate in cooperative regional efforts, if available.
8.2	Support enhanced data collection for hazard events of all magnitudes to provide a fuller understanding of the community's hazard characteristics — including those affected by climate change.	
8.3	Factor climate impacts into the planning of operations and coordination of preparedness, response, and recovery activities among first-responders and partners, including public health, law enforcement, fire, school, and emergency medical services (EMS) personnel.	Review and update strategic plans for emergency response, hazard mitigation, and emergency management agencies to incorporate climate change considerations.
8.4	Consider future climate conditions during siting and design of capital facilities, including changes to temperature and rainfall, to help ensure they function as intended over their planned life cycle.	Perform a climate change analysis in the development of any new capital facilities to consider flood and wildfire risk and the potential impact of extreme heat or precipitation.
8.5	Identify and plan for climate impacts to valued community assets such as parks and recreation facilities, including relocation or replacement.	
8.6	Ensure that Snoqualmie's Comprehensive Emergency Management Plan responds to the impacts of climate change and identifies roles and responsibilities to support a sustainable economic recovery after a disaster.	

Snoqualmie Climate Element DRAFT Greenhouse Gas Emissions Reduction Goals and Policies

Policy ID	Policies	This Might Look Like	
GOAL 1	Improve the efficiency of Snoqualmie's transportation systems and services to reduce greenhouse gas emissions and vehicle miles traveled.		
1.1	Expand electric vehicle infrastructure in the public right-of-way and on public property.	Build EV charging stations on public property, and allow charging stations at service stations and other locations.	
1.2	Prioritize and promote public transit expansion and use through coordination of land use and transportation planning.	Work with King County Metro or SnoValley Transit to provide more frequent and convenient transit service. Support this effort by planning for denser development that will increase ridership.	
1.3	Increase multimodal capacity in coordination with the location of higher-density housing and commercial centers.	Require new developments of a certain size to improve multimodal connectivity by providing sidewalks and bike	
1.4	Create a safe, well-connected, and attractive bicycle and pedestrian transportation network to encourage active transportation	Ensure Public Works' standard road details integrate	
1.5	Integrate "Complete Streets" principles into the roadway designs of residential developments.	"Complete Streets" that make provision for cars, buses, bikes, pedestrians, and other transportation modes.	
1.6	Facilitate the siting of complimentary destinations such as commercial-employment centers, schools or education centers, and residential developments.	Allow mixed-use development in a greater range of zoning districts. Adopt a multiodal Level of Service standard and require	
1.7	Address active transportation and other multimodal types of transportation options in concurrency programs – both in assessment and mitigation.	new developments to demonstrate concurrency.	
GOAL 2	Foster higher-intensity land uses in downtown Snoqualmi	e and other mixed-use areas and transit corridors.	
2.1	Increase density to create more walkable, mixed-use built form that encourages the use of transit, biking, walking, and other modes and decreases single-occupancy vehicle travel and parking.	Adopt code amendments that reduce parking minimums and lowers parking ratios within 1/2 mile (a 10 minute walk) of transit-oriented development and transit stops with frequent transit service.	
	OR	Expedite or simplify permitting requirements for infill development that meets certain criteria.	
	Explore the feasibility of transit-oriented development to encourage use of transit and decrease single-occupancy vehicle travel and parking.	Expand the use of form-based codes to allow a greater range of land uses and development types that meet specific performance standards.	
2.2	Prioritize infill development through zoning and permitting process.		
2.3	Expand form-based codes where appropriate to better integrate higher-density development.		
2.4	Reduce parking minimum requirements and establish parking maximums, especially where there are multimodal options available.		

Snoqualmie Climate Element DRAFT Greenhouse Gas Emissions Reduction Goals and Policies

GOAL 3	Increase housing diversity and supply within urban growth areas to reduce greenhouse gas emissions and support environmental justice.		
3.1	Increase or remove density limits in areas well-served by transit and other services within the urban growth area.	Adopt code amendments to eliminate maximum density requirements, relying on dimensional standards to restrict the number of units or total nonresidential square	
3.2	Allow middle housing types, such as duplexes, triplexes, and ADUs, on all residential lots.	footage to be built.	
3.3	Establish minimum residential densities within urban growth areas.	built, potentially adjustable based on the income level served by the housing (i.e., less affordable housing to be provided if it serves very low income people).	
3.4	Develop and implement inclusionary zoning to support greater income diversity in housing types.	Prepare for infill development by making necessary infrastructure upgrades, such as water, sewer, and	
3.5	Plan for and invest in capital facilities to accommodate infill development.	stormwater services. Consider increasing density before expanding the urban	
3.6	Maintain a stable urban growth area to reduce development pressure on rural and resource lands.	growth area.	
GOAL 4	Ensure that buildings use renewable energy, conservation, a greenhouse gas e	and efficiency technologies and practices to reduce missions.	
4.1	Require additional net-zero greenhouse gas emission features of	Adopt code amendments that require higher energy	
	all new residential and commercial structures and incentivize green building certification to improve energy and environmental performance.	performance or that include on-site electricity generation.	
12	Prioritize the preservation retrofit and adaptive reuse of	Expedite permitting for buildings achieving a green building certification.	
	buildings, recognizing the emission-reduction benefits of retaining		
	existing buildings.	Allow flexibility in development standards to retain and renovate existing structures, such as matching	
4.3	Require all publicly owned buildings to be powered completely by renewable energy by [TARGET DATE].	nonconforming setbacks.	
4.4	Maximize solar access where practicable, including planning for	projects.	
	solar access when siting and designing buildings and considering a requirement for solar panels or solar-ready rooftops for new residential and commercial buildings.	Require structural design capable of supporting a rooftop solar array and conduit runs in place for solar-ready rooftops.	
GOAL 5	Increase tree canopy cover to boost carbon sequestration, re overburdened cor	duce heat islands, and improve air quality, prioritizing nmunities.	
5.1	Require open space set-asides (such as parks) for new	Plant more street trees and trees on public property.	
	Idevelopment.	Require a certain amount of tree canopy coverage in	
5.2	Improve and expand urban forest management to maximize or conserve carbon storage.	new private developments.	
5.3	Maximize tree canopy coverage in surface parking lots.	developments that can be used as urban forest as well as community recreation, achieving a resilience co-benefit.	
5.4	Maintain and manage natural lands (forests, grasslands, wetlands) to maintain or increase their carbon concentrations and avoid conversion of carbon-rich ecosystems.	Minimize deforestation and encourage or require reforestation and restoration of wetlands and other vegetation or ecosystem types that store a lot of carbon.	
5.5	Maintain small forestland ownership and publicly owned forest properties with carbon sequestration as the goal.	Zone outlying forested areas (or coordinate with King County) with extremely low density to discourage the conversion to urban or suburban development.	