

Priority Climate Action Plan (PCAP)

Introduction

The development of the Priority Climate Action Plan is a contingent piece within the broader scope objective of increasing Samish's resiliency and preparedness in the face of climate change. The Samish Indian Nation has been actively planning for Climate Resiliency since 2016. Within the Samish Strategic Plan, goals include *“Develop natural resource management and mitigation plans for Samish-owned properties and areas of Samish interest to address climate change and other environmental threats”, “Analyze, monitor, and track the health and stability of our natural resources in a changing environment and climate”, and “Create and implement a Facilities Management Plan to maintain and preserve our existing facilities, including plans for climate change resilience.”* To date, major products include: educational materials for Samish Citizens, a Climate Change State of Scientific Knowledge report, the development of a Climate Adaptation Planning Framework, a Citizen-driven Climate Change Vulnerability Assessment, a Sea Level Rise Vulnerability Assessment, a Climate Resilient Facilities Management Plan, and the refinement of Climate Adaptation Planning Priorities.

The Priority Climate Action Plan allows Samish to effectively identify the major greenhouse gas emissions produced by tribal operation and then identify and implement methods to reduce its overall production of greenhouse gas as a direct response to the increasingly severe impacts of climate change on Samish peoples, culturally significant natural resources, and infrastructure.

1.1 CPRG overview

The Samish Nation has been actively planning for climate resiliency since 2016. Through funding provided by the CPRG program, the Samish Nation has used the EPA's Greenhouse Gas Inventory Tool to inventory emissions and provide focus to areas where projects will have the maximum impact reducing GHG emissions produced through Tribal operations. Areas of focus included electricity consumption, water consumption, fuel sales at the Tribally owned gas station/convenience store and solid waste produced at the Tribal government's offices and properties. This information has been entered into the GHG Inventory Tool and collated into the PCAP. During the second phase of this project, we will expand this Preliminary Climate Action Plan (PCAP) into a more complete Comprehensive Climate Action Plan (CCAP).

1.2 PCAP Overview and Definitions

Priority measures for reducing the GHG emissions of the tribe's administration include the installation of solar energy panels on tribal buildings. This includes retrofitting existing infrastructure with solar panels, as funding allows. It also includes requesting solar panels to be installed on future infrastructure projects. Other measures include the replacement of existing low efficiency lightbulbs in tribal buildings, with high efficiency bulbs as a cost and energy saving method. Waste reduction methods may include the reintroduction of compost services for food or other organic waste produced by the tribe as well as providing outreach material to help Samish citizens and employees better understand what waste may be recycled instead of discarded into landfills.

1.3 Scope of Preliminary Climate Action Plan

While Samish Traditional Territory extends from Whatcom, Skagit, Island, and San Juan counties the Samish Greenhouse Gas emissions center primarily around the day-to-day operations of ten facilities owned by Samish prior to 2022, and as of 2022 the property at which Samcor Fuel & Tobacco has been built, located along highway 20 on the east side of Lake Campbell. That property, along with the other ten facilities located in Anacortes, Washington along Commercial Avenue, D Avenue, Seafarers Way, and Summit Park Road are the current scope of the Preliminary Climate Action Plan. This scope will broaden to new tribal infrastructure as data is collected for the greenhouse gas emissions footprint of future development.

In 2024, Samish is slated to open the Xwch'angteng Housing project. This project will provide homes to Samish citizens in need of rehousing. This also represents an increase in the expected GHG footprint of the Tribe's administration that may be reflected in the Comprehensive Climate Action Plan. The scope of future climate action plans will need to change to reflect the growth of Samish's footprint within its Traditional Territory.

1.4 Approach to Developing the PCAP

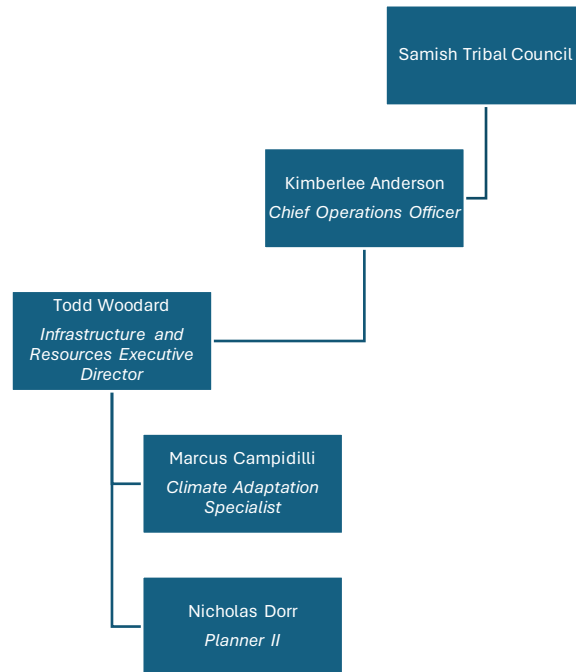
Our team developed the Priority Climate Action Plan (PCAP) using several different approaches. Development of a full GHG emissions inventory was the primary focus of our work under the CPRG program. This was the first emissions inventory ever conducted by the Samish Nation. Understanding the GHG emissions inventory was crucial to our team's ability to accurately assess the current level of emissions being produced through Tribal operations and ability to issue mitigation recommendations. These were identified as deliverables that will be met through the development of the PCAP in our workplan.

Significant stakeholder engagement has taken place in order to develop several documents that lead up to the CPRG project and the completion of the Samish Nation's PCAP. This included engagement of Samish citizens' and Tribal leadership in the development of a Climate Adaptation Planning Framework, a Citizen-driven Climate Change vulnerability assessment, and a Sea Level Rise Vulnerability Assessment, amongst other Climate Adaptation Planning priorities identified. These documents, combined with data compiled through the GHG emissions inventory tool have been crucial in the development of a PCAP that accurately reflects the Samish Nation's development goals and one that centers the protection of the environment for future generations of the Tribe.

2. State/MSA Context

2.1 The Tribal/Territorial PCAP Management and Development Team

This project is a joint effort between the Samish Nation Department of Natural Resources (DNR), and the Samish Nation Planning Department. Both departments are represented by their respective Quality Assurance Managers, Marcus Campidilli with the DNR and Nicholas Dorr with the Planning Department. Both departments are headed by the Infrastructure and Resources Executive Director, Todd Woodard. The Infrastructure and Resources Executive Director reports to the Chief Operations Officer of the Tribe, Kimberlee Anderson, who reports directly to Tribal Council.



2.3 Collaborations

Collaboration was an essential part of our ability to develop the PCAP in a timely manner. Collaborative efforts with utility companies were what allowed us to access usage data for both the electricity and water usage of the tribe. Puget Sound Energy (PSE) was the company that provided us access to utility usage data. The City of Anacortes Utility Department was an essential partner in obtaining water usage data. The Tribe’s economic development arm, SAMCOR, was a private entity that proved a valuable partner in determining the impact of the gasoline being sold by the Tribe through the Tribally owned convenience store and gas station, SAMCOR Fuel & Tobacco. These were crucial to the completion of a GHG emissions inventory.

Collaborative planning efforts with Samish citizens and Samish leadership allowed the Samish Nation to develop robust, community-driven approaches to responding to climate change. This includes an extensive amount of climate change adaptation planning undertaken, and assessments, research, and formalized development documents that address the most pressing challenges posed by the climate crisis and the anticipated impacts that these will have on the Samish Nation and throughout Samish Traditional Territory. This formed an essential base on which to develop the Priority Climate Action Plan.

3.1 Greenhouse Gas Inventory

The scope for the Greenhouse Gas Inventory includes the nine facilities owned by the Samish Indian Nation in and near Anacortes. Those properties included in the inventory are, the facilities at the Commercial Street administration campus, the Cannery Building on Seafarers Way, the D Avenue Longhouse Early Learning Center, the campus on Summit Park Road, and SAMCOR Fuel & Tobacco along Highway 20 south of Anacortes. The Samish Indian Nation has a very small amount of land put into trust. This means that our overall GHG emissions is limited to the buildings and

facilities currently owned by the Tribe, although future development and land acquisition will change the overall GHG emissions footprint of the Tribe’s administration.

Data collection of Samish GHG emissions was limited by our personnel capacity and our timeline. Samish staff collected electricity consumption data, water use data, and fuel sales and consumption.

Electricity Use Data 2021 All Campus’

Table 1. Activity Data by Sector and Utility

Sector	NWPP eGRID subregion	TOTAL
Residential	-	-
Commercial/Institutional	251,233	251,233
Industrial	-	-
Energy Generation	245,280	245,280
Total	496,513	496,513

Table 2. CO2 Emissions by Sector and Utility

Sector	NWPP eGRID subregion	TOTAL
Residential	-	-
Commercial/Institutional	68	68
Industrial	-	-
Energy Generation	67	67
Total	135	135

Table 3. CH4 Emissions by Sector and Utility

Sector	NWPP eGRID subregion	TOTAL
Residential	-	-
Commercial/Institutional	0.16	0.16
Industrial	-	-
Energy Generation	0.16	0.16
Total	0.32	0.32

Stationary Emissions Data 2022 – SAMCOR Fuel & Tobacco

Emissions by Sector (MT CO ₂ e)				
Sector	CO ₂	CH ₄	N ₂ O	Total
Residential	-	-	-	-
Commercial/Institutional	23,009	24	58	23,091
Industrial	-	-	-	-
Energy Generation	-	-	-	-
Total Stationary Combustion Emissions	23,009	24	58	23,091

Overall emissions from electricity for tribal administration of the Samish Nation was 136 MT CO₂. This includes electricity use at all facilities owned by the Tribe, including the SAMCOR Fuel & Tobacco.

Fuel & Gas 2022-23

Table 4. 2022-23 Fuel Sales and Energy Use

Fuel and Energy (MMBtu) Use by Sector				
Sector	mcf	gal	tons	Energy Use
Residential	-	-	-	-
Commercial/Institutional	-	2,707,276	-	325,647
Industrial	-	-	-	-
Energy Generation	-	-	-	-
Total Stationary Combustion Energy Use	-	2,707,276	-	325,647

Fuel sales from the SAMCOR Fuel & Tobacco store produced 23,091 MT CO₂. That emissions quantity was based on the 2,707,276 gallons of gasoline sold at the store and then put through the EPA’s greenhouse gas inventory tool.

Solid Waste 2023

Samish does not have the personnel or resources to sort the entire Tribal administration’s solid waste, and then calculate the MT CO₂ from that information. Tribal staff decided that the alternative solution was to record the volume of waste generated weekly over a three-month period and then infer from that representative sample what a year of solid waste generation would look like. While this isn’t an accurate measurement of MT CO₂ emissions, it is a foundation from which we can, as funding allows, identify emissions on a yearly basis as resources and capacity grows.

Water Use Data 2023

Due to the Tribal administration's location in the northwest corner of Washington State, tribal water use was entirely from local sources and thus the import of water from other states or sources is not a necessity that reflects in our overall emissions data as an emissions source. All water use emissions from pumps or other means of moving water are tied into our electricity emissions data. Our overall water uses for 2023 was, among all campus', 48,242 gallons annually. Water use data was pulled from the City of Anacortes' data for all the facilities currently owned by the Tribe.

Greenhouse gas emissions accounting was done by recording the electricity data from all of the facilities owned by the Tribe through our accounting system, recording the water use data provided by the city of Anacortes for all properties owned by the Tribe, and solid waste data was collected by Samish staff recording the volume of waste in each of the Tribe's facilities' weekly over a quarter annual period and inferring a yearly output based on that quarterly representative sample.

3.2 GHG Emissions Projections

Due to the resources and personnel limitations for this project, we felt that the data set used to identify our current emissions needs further collection prior to identifying significant GHG emissions projections over a multi-year period. Growth of the tribe's administration and facilities mean that emissions projections are also subject to change and need further analysis prior to providing an accurate projection estimate.

3.3 GHG Reduction Targets

Reduction targets follow emissions projection estimates, and thus a larger data sample for all tribal facilities as well as growth forecasting is required prior to identifying an accurate reduction target over a multi-decade period.

3.4 GHG Reduction Measures

Samish goals, regarding the installation of, primarily, solar energy on administrative facilities represents a primary greenhouse gas reduction measure on all commercial and institutional developments. Using the emissions data recorded during the 2023-24 CPRG PCAP portion of this project, Samish has effectively identified the existing GHG emissions of its infrastructure. Future GHG reduction measures will be quantified as a measurement of the overall reduction in GHG that the installation of solar energy provides to Samish facilities. It is currently too early in the development of these reduction measures to provide an accurate cost estimate on the installation of solar energy on existing or future developments throughout the Tribe's expanding facilities portfolio.

Future reduction measures that focus on the reduction of waste output may take the form of an administration wide push to compost organic waste output or outreach material on the impacts that single use plastics have as well as alternatives to single use plastics in day-to-day operations.

Due to the Tribe's small footprint, geographically, GHG reduction measures regarding any agricultural or energy generation emissions are negligible to the status of Tribal operations.

As a native sovereign nation, Samish' authority to implement GHG reduction measures on its trust land is limited only by the resources and funding required to do so. Timelines for the implementation of solar energy installation is limited by funding availability, however waste

reduction outreach material has been an ongoing reduction measure and will continue to be so for the foreseeable future.

Furthermore, the work being done by the Samish Department of Natural Resources to monitor and outplant riverine, marine, and terrestrial carbon sinks represents a significant effort towards the offsetting of the Tribe's current emissions. As an example, work done to prevent the loss of kelp habitat in Samish Traditional Territory is a method by which GHG reduction measures are being fulfilled by the Tribe. Using memorandums of agreement between the Tribe, the Federal Government, and the Washington State government, GHG reduction measures have been an ongoing means of fulfilling the Tribe's stated goal of reducing its overall carbon footprint and represent an authority to implement these reduction measures. By being supported through funding and working alongside the Bureau of Indian Affairs Tribal Climate Resilience program, the WA Department of Ecology, the WA Department of Fish and Wildlife, and the WA Department of Natural Resources, the Samish Nation has, and will continue to, develop GHG offsetting measures.

3.5 Benefits Analysis

A reduction in the quantity of emissions produced by the operations of the Samish Nation will have a wide range of positive benefits for the Tribe and the surrounding community as a whole. By reducing the amount of electricity consumed by the Tribe we will be able to directly reduce emissions produced by Tribal operations. This includes future investments in renewable energy production that have served as a means for the Tribe to supplement external energy consumed with renewable energy (produced through solar panels) which is being generated at multiple Tribal properties.

A reduction in the amount of water consumed has benefits for the entire Tribe and surrounding community as well, including a more sustainable approach to resource consumption, and preservation of a limited and vital natural resource.

Emissions reductions in general will have wide ranging implications that are largely beneficial. Central to this will be the positive impacts to local ecosystems that a reduction in emissions will enhance. We can anticipate an overall reduction in emissions to mean less strain put on natural resources, and an overall more sustainable approach to development and day-to-day operations. This is directly in line with the goals of the Samish Nation, which holds that maintaining the integrity of the environment for future generations of Samish citizens is paramount.

3.6 Low Income Disadvantaged Communities Benefits Analysis

The benefits of completing the GHG inventory are expected to be felt on a community-wide scale. The entirety of the Samish Nation is a historically underserved community that has been disproportionately affected by the climate crisis. The anticipated effects of sea level rise, warming oceans, rivers, and streams, and other climate related disasters have already had a massive impact across the Samish Nation's homelands. Given this context, the Samish Nation has been actively planning for the impacts of climate change for years and has successfully incorporated climate adaptation planning and mitigation into future planning and development efforts, forming a key part of the Samish Tribe's service delivery to its citizens.

With this in mind, the benefits that result from the PCAP, CCAP, and completion of the GHG emissions inventory are expected to be felt on a community wide scale. This includes a reduction in

electricity consumption and an even greater push to incorporate solar power generation into future developments, the benefits of which will be vast including significantly lowered GHG emissions and the increased use of energy from renewable sources. Reduction in water consumed through Tribal operations will allow for more of this resource to be preserved for the use of private citizens, allowing for better management of limited natural resources. A significant added benefit of this project will be the positive impacts to local ecosystems resulting from the reduction of GHG emissions. We anticipate this to support an overarching community goal of preserving the environment and maintaining the health of the local ecosystem for the use and enjoyment of future generations of Samish people.

3.7 Review of Authority to Implement

As a federally recognized tribe the Samish Nation has full authority to implement and enforce any laws, regulations, and codes passed by the Samish Tribal Council on all lands held by the Samish Nation whether in fee or in trust. This includes any GHG reduction measures or recommendations that may result from the CPRG project.

3.8 Intersection with Other Funding Availability

Additional funding mechanisms will be crucial in sustaining and supporting the ability of the Samish Nation to conduct important climate research and maintain and expand the existing climate adaptation, mitigation, and response planning and research currently ongoing within the Tribe. Additional funding mechanisms have already been employed by the Samish Nation, which seeks funding for climate adaptation and response projects from several local and state sources including not only the EPA, but the Bureau of Indian Affairs (BIA), and the State of Washington as well. Funding under the BIA's Tribal Climate Resilience grant represents a significant funding opportunity for future climate adaptation and mitigation projects.

3.9 Workforce Planning Analysis

An analysis of workforce development activities needed to implement priority measures in the PCAP will focus on two areas. The first area of focus will be obtaining new funding to continue needed climate research, mitigation, adaptation, and planning. This includes continued seeking of funding opportunities to address potential new hazards resulting from the effects of climate change, and funds for the implementation of additional planning and mitigation measures to address these potential effects. The second area of focus will consist of the hiring of new staff, and leveraging local partnerships, to train and hire personnel to continue the implementation of important climate pollution reduction measures.

4. Next Steps

With the finalization of the PCAP, the Samish Nation is well on its way to completing the CCAP, which is anticipated to be finalized in 2025 assuming that implementation funds are made available. Over the long term, Samish will implement prioritized measures to reduce its GHG emissions for the benefit of its Citizens. In addition, Samish hopes to make a meaningful contribution to climate pollution reduction in the State of Washington and the Pacific Northwest Region including the Salish Sea.