



The Samish Indian Nation, nestled in the San Juan archipelago off the northernmost tip of Washington state, is comprised of people of the Salish Sea. Samish, or Xws7ámesh, means "the people who stand up and give." Every part of their culture and traditions can be traced back to the ebb and flow of the tide and the abundance and variety of marine life, which are all under threat due to climate change.

Samish elders have observed in their lifetimes decreases of the most important species in the area, including orcas, salmon, and shellfish, and how the giant kelp beds of their youth have all but disappeared. Cultural species that they used to gather for crafts and food are harder to find, and do not bloom at all in some years. Cultural events such as basket weaving classes are sometimes impossible to hold if the supplies cannot be found at the right times. These changes have led to spiritual suffering throughout the community.

Over the past decade a gradual trend of rising sea levels has also been observed. Intense winter storms have led to coastal flooding; king tides (which are exceptionally high tides that are both naturally occurring and predictable) have been larger than in the past. King tides coupled with winter storms have damaged infrastructure, leading to further flooding and temporary loss of access to the mainland. Cultural sites are at great risk from the erosion caused by rising sea levels.





Rising sea levels are also interconnected with salmon, shellfish, and a number of other important first foods throughout their life cycles. In addition, their near-shore habitat and estuaries have seen rising temperatures and acidity which impacts their food; changing seasonality, precipitation, and stream temperatures impact their breeding and rearing habitats.

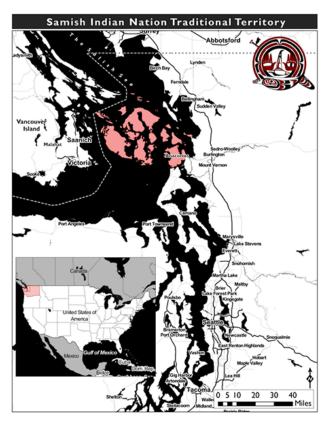
The region has seen overall trends of warming: elders report that when they were kids, winters used to be colder and snow storms were bigger and more frequent.

The month of August is now known as "smoke season" due to increasing frequency of regional wildfires. Community members have felt the impact of smoke on their health. The Natural Resources Department has had seasons they were unable to go into the field due to the smoke creating unsafe operating conditions.

Samish Big Picture Response to Climate Change

Just as the Samish people have proven adept at navigating many changes over time, their response to climate change demonstrates their agility and their commitment to the natural world.

The Tribe is engaged in climate change mitigation (efforts to reduce greenhouse gas emissions) and adaptation (responding to current and future issues caused by a changing climate) from a local to a global scale, and everything in between. Locally, the Samish Council has committed to creating a climate resilient community and reducing the Tribe's carbon footprint through energy efficiency and renewable energy development. The Tribal leadership and community members all recognize the importance of action, and are committed to



working on the larger policy side as well as local habitat restoration. Samish leadership continue to support state and federal policies that encourage energy efficiency and renewable energy development, including engagement in carbon tax initiatives, for which they were featured in an ad campaign in the state of Washington https://www.youtube.com/watch?v=1r480JHpYho. The Tribe employs lobbyists to advocate for a number of Samish interests with the federal government. Samish has also recently initiated government-to-government consultation with the EPA to raise concerns about policies that would increase national greenhouse gas emissions. The Samish Tribe is one of ten tribes that are signatories to the *We Are Still* In campaign (https://www.wearestillin.com/organization/samish-indian-nation), which is a coalition of economic and social leaders across the United States who are committed to meeting the goals of the Paris Climate Agreement, and are seeking to be members of the UN Indigenous Peoples Forum to be part of a unified indigenous voice regarding climate change. The Samish Tribe has also partnered with Indigenous people around the world (https://www.vice.com/en_us/article/vbjn8m/an-inter-tribal-canoe-journey-is-helping-scientists-

<u>fight-climate-change</u>) to share knowledge and cultural information to help in the fight against climate change.

Samish Adaptation Planning

In 2016, the Natural Resources Department's Climate Change section embarked on long term climate adaptation planning to address their local needs. Traditional ecological knowledge (TEK) was relied on throughout the project, and the project was overseen by a Climate Working Group, made up of community members, one Councilmember, and one representative from every tribal department.

This community-driven project is made up of three phases. Phase 1 of the project consisted of gathering information, building support, and deciding what framework to use for the Vulnerability Assessment. The Vulnerability Assessment was necessary to determine what may be impacted by 2050 and 2100, and which key areas to focus on for further assessment.

In Phase 2, they worked with all the departments' staff to develop the Vulnerability and Risk Assessment and begin the planning process. They built a list of concerns, and divided them into three categories: built environment, natural environment, and human environment. One hundred sixty-six different species were identified as culturally, historically, or ecologically important and potentially vulnerable. This list was entirely generated using TEK. One piece of this phase was the development of a story map

https://samish.maps.arcgis.com/apps/Cascade/index.html?appid=a28a212bf84b4b8e9e743ee8 8fe3dc5b, tracking the future impacts of climate change to their traditional lands. The story map received the high honor of being one of the winners of the 2018 Esri Tribal Story Map Challenge. (https://www.anacortesnow.com/news/community-news/3816-samish-climate-change-story-telling-map-wins-award)

The project is currently in Phase 3, working on in-depth adaptation project assessments as well as a more comprehensive, shoreline-focused Vulnerability Assessment and resource management planning – these are split into two separate projects, one focused on coastal management and the other focused on infrastructure, health, and inland natural resources. This phase also includes setting SMART (Specific, Measurable, Attainable, Realistic/Relevant, and Time Bound) resilience goals, creating adaptation actions, adopting the Samish Climate Resiliency Plan, and implementing it through an annual work plan and monitoring efforts.

Phase 3 of this project is funded through July 2, 2019, with a Department of Energy grant, plus two grants through the Bureau of Indian Affairs (BIA) that will carry them through the adaptation planning phase, using the Vulnerability Assessment as a basis. Beyond that, securing funding will be critical to conduct modeling for the major uncertainties that remain regarding how climate change will impact wave action, storm surge, and coastal erosion.

Early and in-depth outreach has been key for this project. A common outreach tool for many projects is to use online surveys, but the Samish Tribe has found that it is important to keep the surveys short, and use concise, pointed questions. They have also found that one-to-one

interviewing leads to gaining more valuable information than online surveys do. The conversations or in-person interviews lead to gaining deeper insights and profound observations.

The Samish Indian Nation will continue to thrive and while inspiring climate action and adaptation from the local to the regional to the national to the global scales, just as they always have.

Resources: Story Map – Our Future Climate in Samish Traditional Territory: https://samish.maps.arcgis.com/apps/Cascade/index.html?appid=a28a212bf84b4b8e9e743ee886e3dc5b

Carbon Tax Ad Campaign video: https://www.youtube.com/watch?v=1r480JHpYho

This profile was developed in 2019 by Dara Marks-Marino, Institute for Tribal Environmental Professionals, Northern Arizona University, with financial support from the Bureau of Indian Affairs. The profile is available on the Tribes & Climate Change website: www7.nau.edu/itep/main/tcc/Tribes/. The tribal climate change profiles featured on the website are intended to be a pathway to increasing knowledge among tribal and non-tribal organizations interested in learning about climate change mitigation and adaptation efforts.

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