2017

Nisqually Food Sovereignty Assessment

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Food sovereignty is the right of people to eat healthy traditional foods that are produced sustainably and don't harm the environment...
Through the treaties we reserved the things that were most important to us as a people. Among them was the right to fish, hunt and gather shellfish and other traditional foods to feed ourselves and preserve our cultures.

Billy Frank Jr. 2012
from Being Frank :
Traditional Foods Are Treaty Foods

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Food Sovereignty

Willie Frank III, Reuben Wells Sr, Hweqwidi Hanford McCloud, Farron McCloud, & Naiomie Wilkins at the First Salmon Ceremony

INTRODUCTION

In September 2016, the Nisqually Indian Tribe received a grant from First Nations Development Institute to conduct a Food Sovereignty Assessment (FSA). The FSA took a year to complete and involved taking stock of the resources of the Nisqually Tribe's food system.

We talked to many people and heard stories about loading the family into the car and heading to Mount Rainier to harvest huckleberries each Fall. We heard stories from Elders about when they were children, heading out with parents, grandparents, sisters, brothers, cousins, aunts, and uncles to harvest clams. We talked to hunters about harvesting elk and processing everything by hand to put up in the freezer and last through the year.

SESSMENT

We talked to fishermen and fisherwomen about the cultural importance of the salmon runs.

The thread linking all these stories was family and connection to the seasons, the water, and the earth. Many of these stories were also about the past. Almost everyone we talked to said that the harvest, preparation, and sharing of traditional foods has decreased dramatically in recent decades. There are many reasons for this, which we explore in greater depth in the report. People also shared a lot of optimism and excitement for the future and had many ideas about how to reclaim food traditions and get more people – especially youth – involved.

What follows is a summary of the conversations, interviews, and surveys we completed this year to get a picture of how food works in Nisqually. There are many pieces left out, because food is so complex and profound. It would be impossible to collect everything all at once. But we hope this report provides a starting place for more conversations, inspiration, and continued action toward a strong and resilient food system in Nisqually.

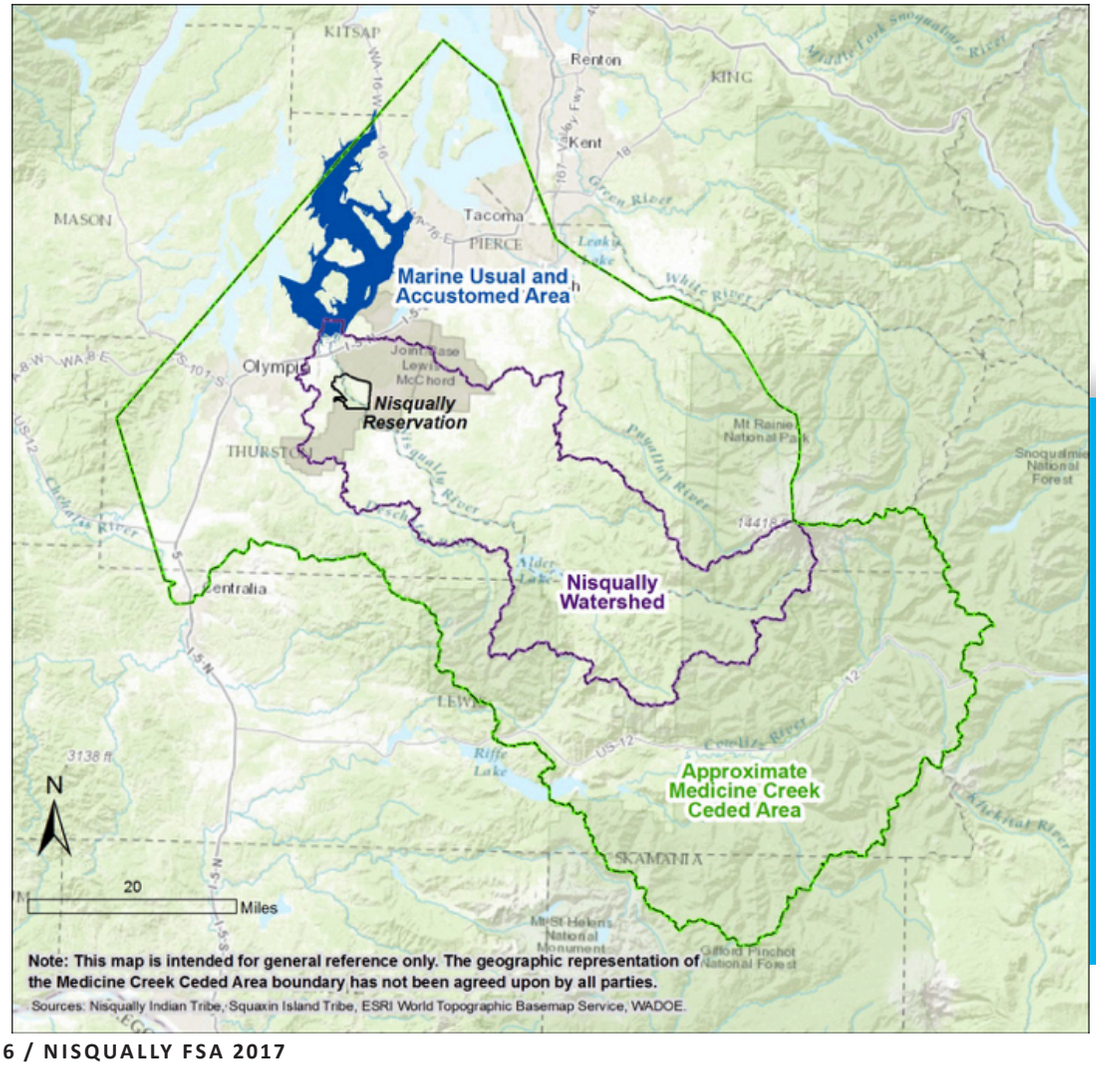
The FSA team worked closely with many Nisqually Tribal Members, staff, and community members, and this report would not have been possible without their wisdom and expertise. To everyone who contributed, we extend our heartfelt gratitude for getting to learn from you.

Nisqually Indian Trib

HERITAGE

Since time immemorial, the people of the Nisqually Tribe lived in relative peace and prosperity in their original homeland. The land encompassed over two million acres near the present-day towns of Olympia, Tenino, Dupont, Yelm, Roy, and Eatonville, from the top of Mount Rainier, along the Nisqually River to the Puget Sound, and beyond. Tribal life changed radically with the advent of white settlement about 180 years ago. Forced to compromise their interests and rights over the years, the people of the Nisqually Tribe have always sought to maintain their integrity, dignity, and sovereignty.

The Nisqually Reservation was established by the Medicine Creek Treaty of December 26, 1854, although whether Chief Leschi agreed to the treaty has been heavily disputed. Leschi led Nisqually warriors during the Puget Sound War of 1855–1856, which ended in the Nisqually Reservation being relocated to a larger, more favorable location adjoining the Nisqually River.



This map gives a general overview of the Nisqually Tribe's ceded lands and harvesting areas. Cartography by: J Cutler, Nisqually Indian Tribe 2017

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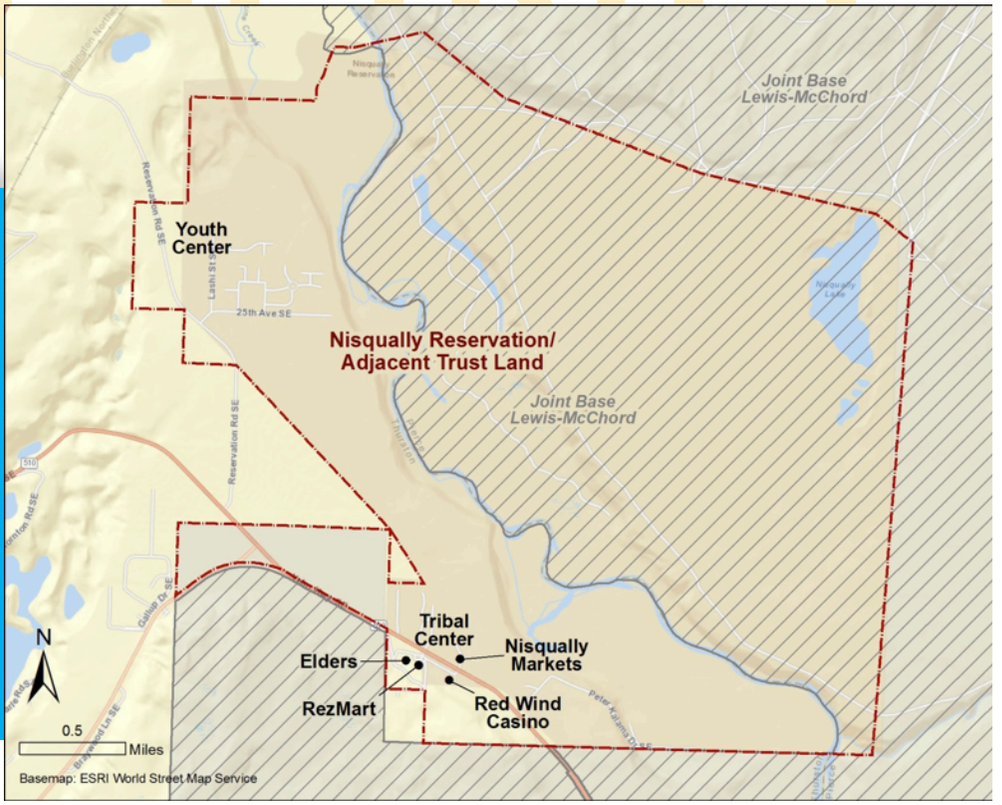
The Nisqually Reservation & adjacent trust land. Note that the majority of the Reservation is occupied by US Joint Base Lewis-McChord. Cartography by: J Cutler, Nisqually Indian Tribe 2017



LOCATION

The Nisqually Reservation was broken into individual allotments in 1884. In the winter of 1917, the U.S. Army moved onto Nisqually lands and ordered families from their homes without warning. More than 3,000 acres – all Reservation land north and east of the Nisqually River – was condemned by Pierce County and transferred to the federal government to build a military base.

Today, the Nisqually Indian Reservation is located fifteen miles east of Olympia, Washington, along the Nisqually River. Approximately two-thirds of the reservation is occupied by the U.S. Joint Base Lewis-McChord, mostly serving as an artillery impact area. The other third of the reservation is located to the south and west of the Nisqually River in Thurston County, and is in a combination of tribal ownership (about 450 acres), private Indian allotments (about 800 acres), and held by private non-Indian owners (about 450 acres).

POPULATION

According to the Nisqually Indian Tribe's enrollment records, there are approximately 800 enrolled Nisqually Tribal Members. In 2010, 575 individuals reported living on the reservation in the U.S. Census. Of those individuals, 394 self-reported being American Indian or Alaska Native. The Nisqually Health Services records show a population of approximately 4,271 Native American individuals accessing services in the local area (2014).

Survey Results

DEMOGRAPHICS

This survey was originally completed by 156 people. There were 93 enrolled tribal members who were surveyed and 40 non-enrolled tribal employees. Of enrolled tribal members surveyed, 41 live on the Nisqually Reservation, 21 live near the reservation (Lacey, Olympia, Tumwater, Yelm, Roy, Dupont), 7 live 15-25 miles from the reservation, and 19 live over 25 miles from Nisqually (5 people skipped this question).

For the purposes of this report, all data analysis is from enrolled tribal members who live within 25 miles of the reservation (69 people total), unless otherwise specified.

Age

18-24	4%
25-30	0%
31-40	17%
41-54	29%
55-63	26%
64+	26%

Education

Less than High School	6%
Some High School	6%
High School Diploma/GED	22%
Some College	34%
Associates (2 year) Degree	13%
Bachelor (4 year) Degree	17%
Graduate/Professional Degree	3%

Self-identification

Community Member	39%
Employee of Tribe	30%
Elder	32%

Gender

Female	52%
Male	48%

Relationship Status

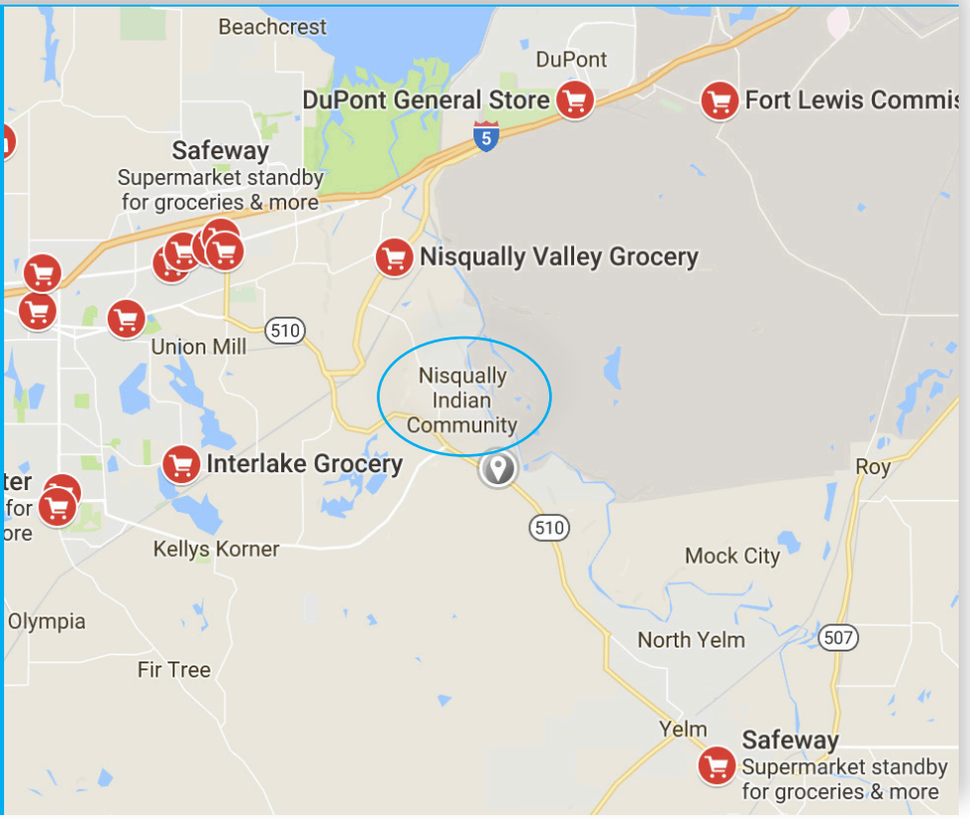
Single	35%
Domestic Partnership	6%
Long-term relationship	5%
Married	39%
Divorced/Widowed	15%

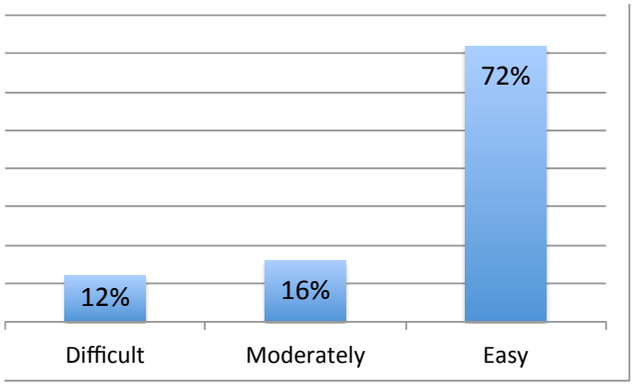
52% **Of Survey Respondents were Enrolled Nisqually Tribal members age 55+**

GRAPHICS

The majority of those surveyed are living with between 2-5 people in their household (79%). Only 9% of those surveyed are the only person in their household. The most people living in a given household was 8 people. Within households, there is a mix of enrolled Nisqually, not-enrolled but descendent Nisqually, enrolled in other federally recognized tribe, and non-tribal. Additionally, most people are living with their spouses/partners and children, but there is also a wide range of people living with other family members and friends. There were 30% of respondents who said nobody in the house was working at least part-time.

The Nisqually Indian Tribe does not have a grocery store. Most families go to either Yelm or Lacey for their grocery shopping (approximately 15-20 mins away by car).





HOW EASY IS IT TO GET TO A FOOD STORE?

Respondents overwhelmingly said that it was easy or moderate for them to get to food stores. 72% of respondents said it was easy, while 16% said it was moderately easy, and 12% said it was difficult. Most people either drive their own vehicle or ride with friends/ family to get to food stores, and most people live 6-10 miles from the top three places they shop for food most often.

(Q# 23, 24, 25, 26, 27, 28, 32, 35, 36, 37)

Survey Results

Most people either drive their own vehicle or ride with friends/family to get to food stores, and most people live 6-10 miles from the top three places they shop for food most often.

The top 3 types of establishments where people get their food “a lot” of the time are grocery stores (like Safeway) 80%, box stores (like Wal-Mart) 48%, and fast food restaurants (like McDonalds) 22%. Additionally, 56% of participants reported eating at the Redwind Casino/Deli either “a lot” or “sometimes”, while only 12% say they “never” eat there.

As can be seen in the graph, most people do not participate in hunting, fishing, gardening, gathering traditional plants, or preserving cultural foods. However, 37% of people would like to learn how to hunt, 38% would like to learn how to fish, 59% would like to learn how to garden, and 60% would like to learn how to gather traditional plants and preserve cultural foods.

ACCESS

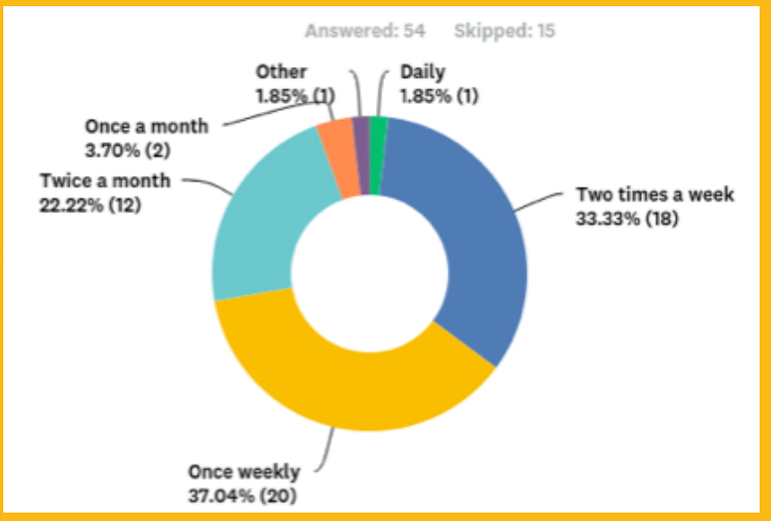
32% of people never get food from the garden. 65% of respondents get food from the garden rarely, sometimes, or seasonally. Only 4% of participants get their food from the Nisqually Garden “a lot” of the time, and 33% reported they never get food from the garden. The Nisqually garden is only available to the community from July-October.

Respondents have stated that they are primarily shopping for groceries one to two times per week. When shopping, most people reported paying with either a debit card, cash, check, or a credit card.

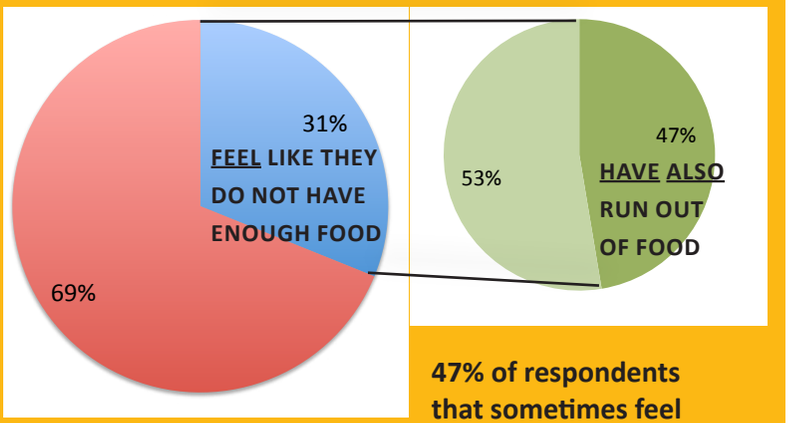
Overall, respondents reported being most concerned with the freshness and cost of their food, as compared to its nutritional value.

The survey also inquired about emergency foods for in the case of an earthquake, etc. There were 28% of respondents who reported stocking emergency foods, while 40% attempt to, and 32% do not.

HOW OFTEN DO YOU SHOP FOR GROCERIES?



31% OF ALL RESPONDENTS SOMETIMES FEEL LIKE THEY DO NOT HAVE ENOUGH FOOD

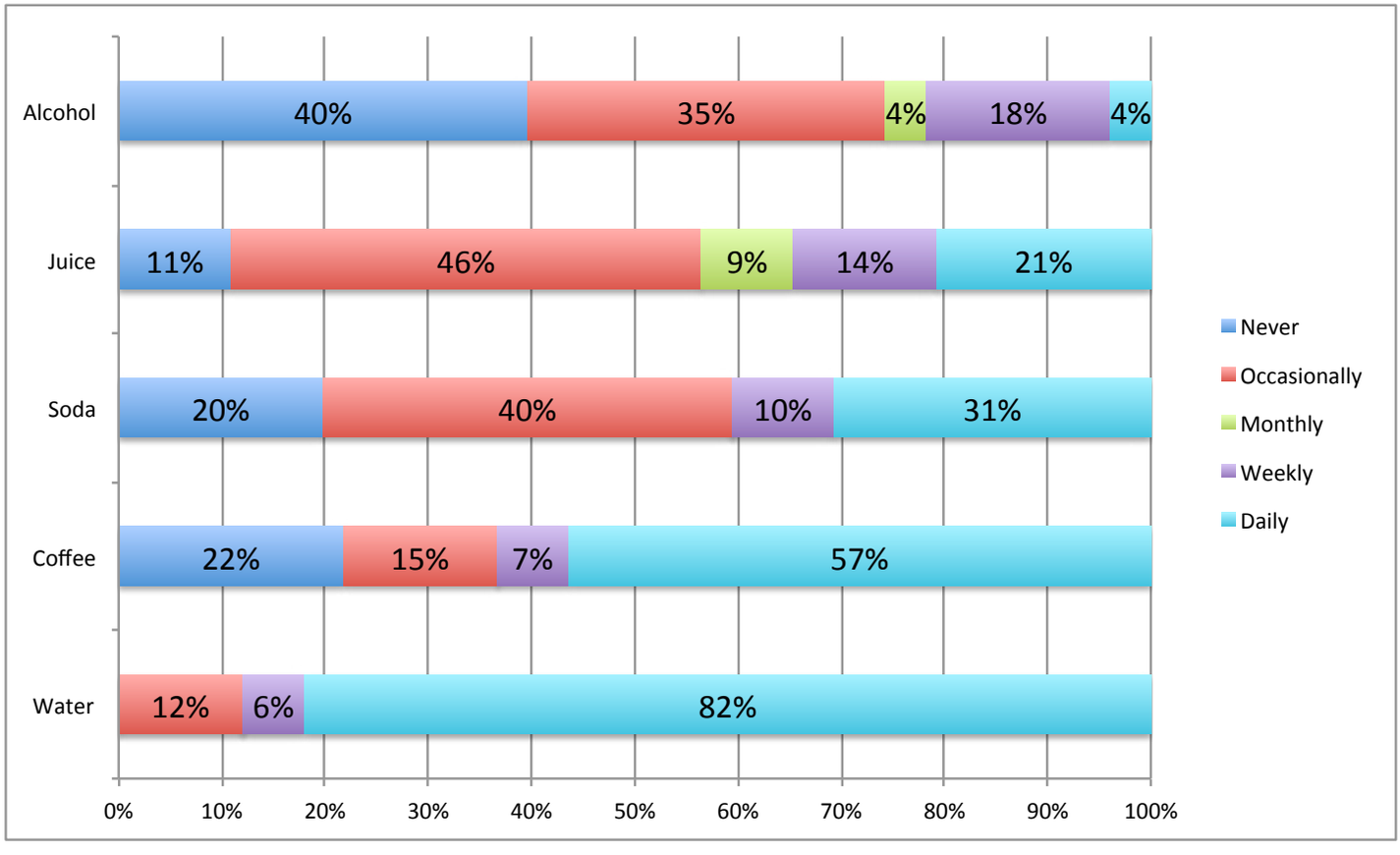


47% of respondents that sometimes feel this way have also run out of food without the ability to get more

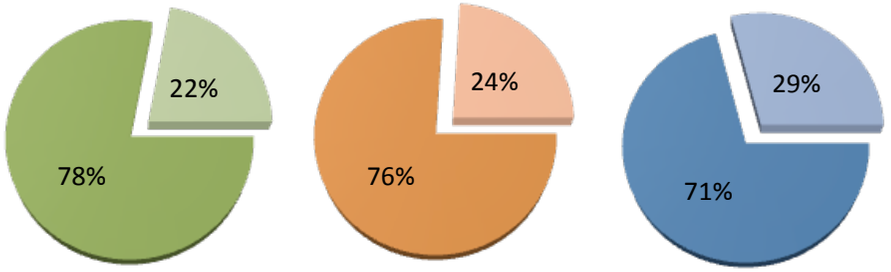
(Q# 30, 31, 13, 12, 11, 14)

Survey Results

The beverages that participants drink most often include water, coffee, soda, and juice. Most people drink water daily, and many people drink coffee and soda at least occasionally, often weekly. There were 25 participants (38%) who said they do not drink tap water, most of them stating that they "do not trust it's safe". Of the 55 respondents who reported on their alcohol consumption, only 4% said they drink it daily while 40% report never drinking alcohol.



DIET

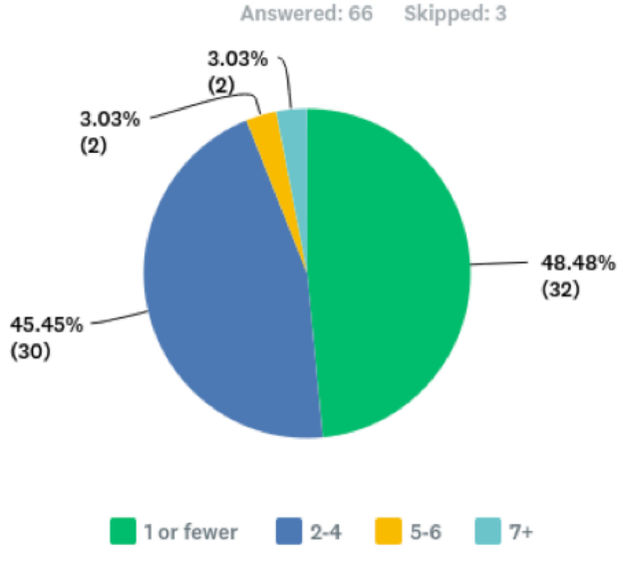


Additionally, respondents noted their concerns about chemicals (78%), hormones (76%), and GMOs (71%) in their food.

Overall, respondents are eating very few fruits and vegetables each day. While recommendations vary, it is thought that people should consume at least 2 cups of fruits/vegetables daily, and 5 or more for best health. There were only 4 respondents who reported eating 5+ cups per day. About 48% report eating 1 or less cups of fruits and/or vegetables daily.

When people do eat fruits and veggies, they are usually fresh, sometimes canned or frozen, and occasionally dried or pickled.

Q13 Cups of fruits and vegetables eaten per day



(Q#, 44, 45, 33, 34)

Survey Results

There were 47 participants (71%) who reported skipping meals. Of those who skip meals, 23% say they don't have time to eat, 18% say they forget to eat, and others do not eat because of stress, lack of lunch break, weight loss, or other reasons. Only 6% of respondents skip meals because they do not have the money to eat.

When people eat, they are eating food prepared in a wide variety of ways for each meal. Our data shows a fairly even spread among participants and how their food is prepared. Each week, most people eat a mix of food cooked from scratch, prepared meals (boxed/frozen), fast food/convenince store food, food from restaurants, and food from community events. No one meal preparation method dominates, however only 1 out of 3 meals are made from scratch by participants.

Of Survey Respondents reported skipping meals **73%**

Food is Medicine

Eating traditional, healthy foods and not skipping meals have been linked to lower obesity, lower rates of diabetes, and fewer chronic diseases.

Food Sovereignty and access to traditional foods have the potential to improve the community's health.

COOKING

In their homes, most participants had...

The clear majority of participants had the following working appliances in their home: sink, refrigerator, electricity, running water, heat, oven, microwave, freezer, and internet. In addition, over 50% of participants also had a wood stove that could be used when electricity is out.

At their homes, some have fruits/nut trees or berry bushes (28% and 19%, respectively). 17% have a vegetable garden, 13% have a smokehouse for fish, 6% have a herb garden, 6% have wild edibles, 2% have chickens/livestock. There were 22 respondents (42%) who reported having none of these at their home.

Most Comforatble Preparing & Cooking

- POTATOES
- CORN
- GREEN BEANS
- LETTUCE
- PEAS
- ONIONS
- TOMATOES
- CUCUMBER
- PEPPERS
- CABBAGE
- CAULIFLOWER
- BROCCOLI

Most Unfamiliar Preparing & Cooking

- BOK CHOY
- EGGPLANT
- LEEKS
- COLLARDS
- KALE
- CHARD
- WINTER SQUASH
- PUMPKINS
- BEETS
- TURNIPS
- RADISHES
- SPINACH

Only 18% of respondents currently compost their food waste, however, 28% would like to learn. People do not compost due to a lack of space, lack of knowledge, or concerns over animals getting into it.

Wesley Olin

Survey Results (Q# 7, 8, 43)

There were 55 respondents (87%) who said they know how to cook and 43 (68%) who said they enjoy cooking. There were 20 (32%) who were either neutral or did not enjoy cooking. Only 25 participants (40%) said they know how to preserve foods.

HEALTH

The relationship between food and health is complex and not fully understood within a scientific framework. Social relationships, epigenetics, economic status, histories of personal, family, and cultural traumas, environmental pollution, and many other factors impact health issues. Focusing narrowly on an individual person's choices regarding diet and physical activity can obscure a deeper understanding of the intersecting systems impacting health epidemics in native communities. At the same time, we know that what we eat is important to our health, and in this spirit we share some statistics we believe to be relevant to Nisqually Food Sovereignty.

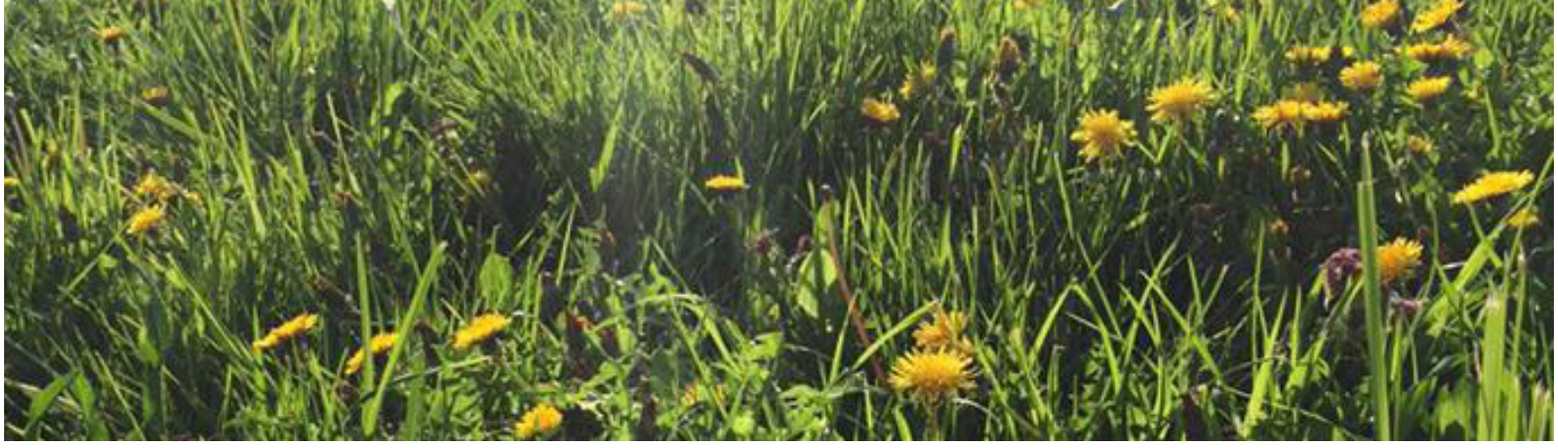
FOOD AND HEALTH

36% reported having high blood pressure

report having a food related illness **76%**

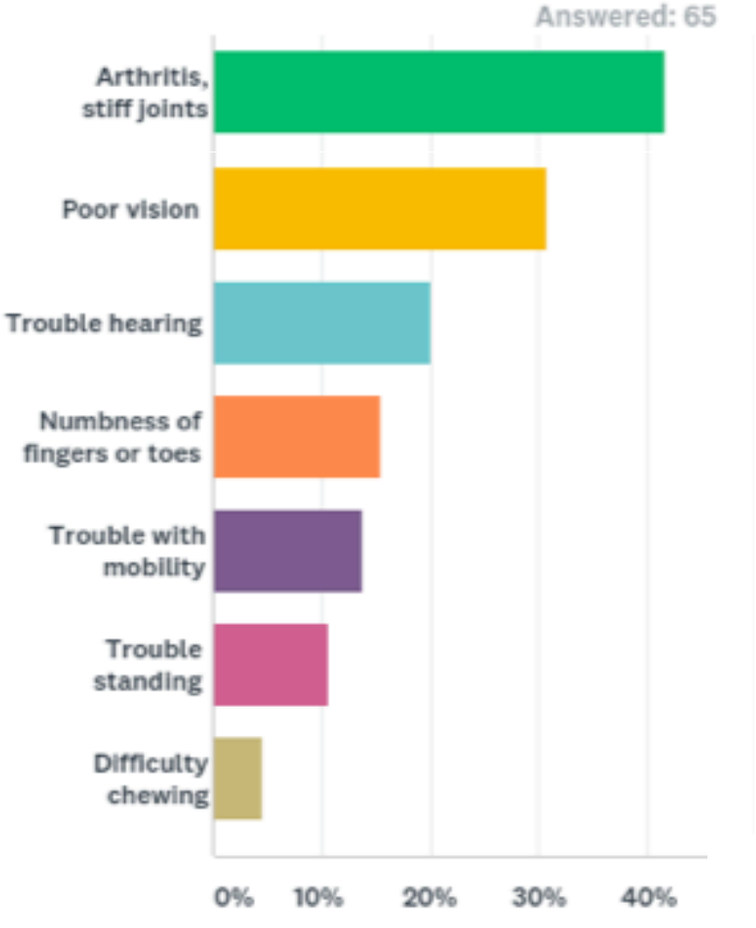
Three generations ago, lifestyle-related diseases - such as diabetes, hypertension, and heart disease - were rare in American Indian communities (Howard et al., 1999). It is no coincidence that research consistently shows the direct relationship between colonization and illness in Indian Country. As Tribes were violently removed from their homelands, native youth were separated from their families and forced to attend boarding schools, and native people were made to depend on commodity foods from the federal government, diets changed from diverse, locally-sourced whole foods to foods high in carbohydrates, sugar, dairy, poor quality fats, and processed foods (NWIC, 2010). Cardiovascular disease is one of the leading causes of death among American Indians. In the United States, American Indians have the highest rate of diabetes, a higher prevalence of overweight and obesity for all age groups, a higher rate of stroke, and a higher rate of heart disease.

Participants in the FSA survey were asked some general health questions. The following graph shows what health problems were reported. Arthritis/stiff joints and poor vision were the two most reported ailments.



Survey Results

REPORTED HEALTH PROBLEMS



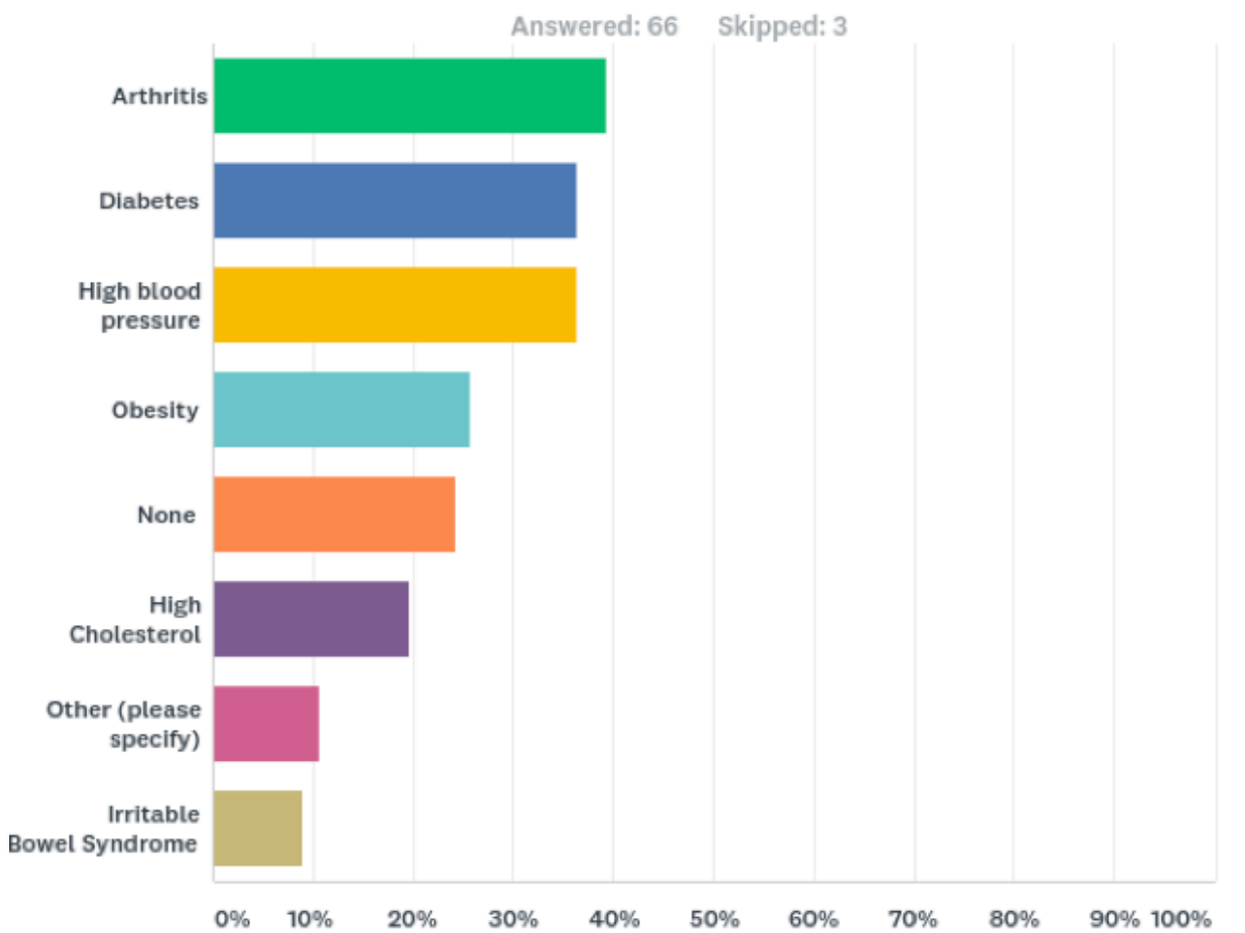
These illnesses are linked to diet as well as many other factors.

HEALTH

Additionally, many participants reported suffering from food related illnesses, as can be seen in the following figure. In our survey, only 24% of respondents reported having no food-related illnesses. 36% reported diabetes, 26% reported obesity, 36% reported high blood pressure, and just under 20% reported high cholesterol.

In a separate question, 77% of participants reported having no known food allergies. 14% of respondents reported being lactose intolerant.

Q8 Food related illnesses reported by respondents:



A NOTE ON BREASTFEEDING AS FOOD SOVEREIGNTY

Breastfeeding was not included in the FSA but deserves consideration in future food sovereignty work in Nisqually. Breast milk is traditionally our first food and is deeply connected to the health of both babies and mothers. Babies who are not breastfed have a 73% increased risk of SIDS, increased risk of obesity, diabetes, and heart disease (NABCWA, 2017). Mothers who do not breastfeed also have increased risk of obesity, Type II Diabetes, and heart disease (NABCWA, 2017). Traditional breastfeeding practices are an important part of native food sovereignty.

We also collected health data indicators from the Nisqually Health Services Electronic Health Record and other secondary sources. We compiled the data on diabetes and obesity for a baseline reference for this report.

The Nisqually Health Clinic serves members of the Nisqually Indian Tribe and members of other federally recognized tribes: about 1,400 individuals total. Data from the clinic is inclusive of all patients.

Obesity-related health risks include diabetes, hypertension, heart disease, stroke, and some forms of cancer. The Centers for Disease Control & Prevention (CDC) has also shown risk factors such as asthma, sleep apnea, low self-esteem, depression, and social discrimination (CDC, 2008).

It is important to note that the labeling of obesity and overweight has been shown to have a negative impact on strategies to address these issues. Tribal communities value inclusion, culture, and tradition. Rather than bringing in the spirit of illness through labels, the AAIP suggests emphasizing the benefits of traditional foods to improve diet-related disease management and risk (AAIP, 2017).

According to the CDC, a BMI 30 or higher is considered obese. Note: BMI cannot be diagnostic of body fatness or the health of an individual. Further assessments are necessary to determine if a high BMI is a health risk (CDC, 2015).

67%

of Nisqually clinic patients diabetic or pre-diabetic

Nationally, American Indians are 2.3 times more likely to have diabetes compared to the U.S. general population (IHS, 2009). According to the 2017 CDC National Diabetes Statistics Report, 9.4% of the U.S. population is diagnosed diabetic.

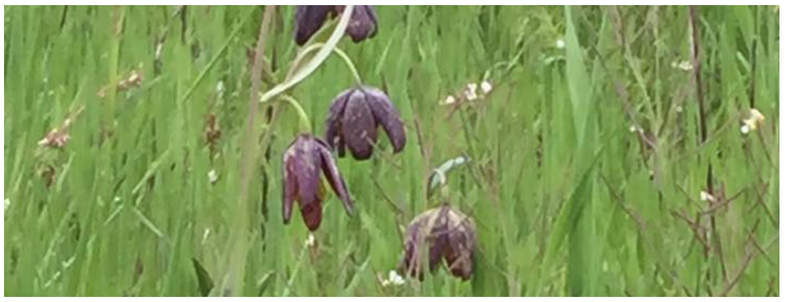
According to the 2016 Nisqually Tribal Behavior Risk Factor Survey, inclusive of adult patients at the Nisqually Clinic, 42% of adults self-reported as diabetic, and 25% self-reported as pre-diabetic. 36% of the Nisqually FSA survey respondents self-reported as diabetic.

Based on this data, there appears to be a much higher prevalence of diabetes and pre-diabetes in the Nisqually area compared to the U.S. general population.

% OF INDIVIDUALS BMI 30+

	NISQUALLY COMMUNITY	GENERAL POPULATION
YOUTH (2-19)	28.9%	14.6%
ADULTS (20-74)	59.0%	25.5%

Youth, General Population is calculated from DOH 2013
Adult, General Population is calculated from the CDC 2012
Nisqually Community numbers are calculated from Nisqually Health Services Electronic Health Record



Survey Results

(Q# 32, 38, 40)

Never get their food from plant gathering 75%

Never get their food from gardening 61%

Never get their food from hunting 57%

Never get their food from fishing 44%

Traditional diets of the Nisqually and other Coast Salish Peoples were very diverse. In 2008, the Northwest Indian College partnered with the UW Burke Museum archaeology team in a two year project called the Traditional Foods of Puget Sound Project. Based on evidence from 31 different dig sites, some more than 5,000 years old, more than 280 types of plants and animals were found (NWIC, 2010).

TRADITIONAL FOODS ARE NOT CURRENTLY A LARGE PART OF THE DAILY FOOD SYSTEM OF PARTICIPANTS, THOUGH MOST WANT MORE TRADITIONAL FOODS

Most Common
Eaten Sometimes - Often

- SALMON
- FISH
- CRABS
- SHRIMP
- CLAMS
- DEER
- ELK
- MOUNTAIN HUCKLEBERY
- WILD BLACKBERRY
- WILD STRAWBERRY
- SALMONBERRY

Least Common
Many "never" have had

- CATTAIL
- CHOCOLATE LILLY
- TIGER LILLY
- SEAL
- DANDELION
- BEAR
- CAMAS

Nisqually Tribal Members
want more of the following

- SALMON
- WILD BLACKBERRY
- MOUNTAIN HUCKLEBERRY
- CRABS
- WILD STRAWBERRY
- SALMONBERRY
- CLAMS
- SHRIMP
- FISH
- THIMBLEBERRY
- DEER
- OYSTERS
- ELK
- ELDERBERRY
- OTHER SHELLFISH
- MUSSELS

The most disliked traditional foods include: octopus, waterfowl/other fowl, seal, bear, oysters, mussels, other shellfish, seaweed, geoduck, clams, and acorns.

Survey Results

A full 74% of participants say they are not eating traditional foods as much as they would like.

There are many reasons that people are not eating traditional foods, as can be seen in the table below. In general, it seems that a lack of knowledge and a lack of access are the biggest barriers.

David Stepetin

Why don't you eat traditional foods as much as you'd like?	% of Reponses
Don't know where to get them	27%
Don't know how to get them	24%
Don't know how to prepare them	24%
Have never eaten them	18%
Don't have access to the places where they are	27%
The place I've gotten them before has been developed	12%
I'm not sure that they are safe to eat (pollution/handling concerns)	10%

Nisqually Food Provider Profiles

Traditional Homelands

dx^{w}sq^{w}aliʔabš

People of the River, People of the Grass

Note: Salmon, shellfish, elk, deer, and plants are at the heart of the Nisqually Indian Tribe's culture and heritage, and the brief descriptions that follow can't begin to do justice to the deep history and complex interrelationships between fishing, hunting, gathering, tribal sovereignty, and the history, ecology, and politics of the entire region. This is intended to be a brief description of the most basic information regarding some of the important elements of the Nisqually Tribe's food system.

Salmon Harvest

SALMON HARVEST PROGRAM

The Salmon Harvest Program's goal is to provide Tribal members with the opportunity to sustainably harvest fin fish in their usual and accustomed area. The Salmon Harvest Program develops run forecasts, tracks run sizes, and helps set fishing schedules to maximize Nisqually treaty fishing and work within management criteria for each species. The program works with the Nisqually Fish Commission, Washington Department of Fish and Wildlife (WDFW), and federal agencies, most notably NOAA fisheries. The goal is to preserve fishing for the Nisqually Tribe, while staying within management guidelines that allow the continued harvest of listed species under the Endangered Species Act (ESA).

There are five species of native salmonids and two species of trout in the Nisqually River watershed. Salmon and some trout can be anadromous – born in freshwater, migrating to the ocean, then returning to fresh water to spawn – or can live solely in freshwater. The generalized lifecycle of Pacific salmon involves spawning, egg incubation, hatching, emergence from redds (nests), development in freshwater, migration through estuaries to the ocean, and return to freshwater for spawning. This is a very simplified version, and there are many variations of this general pattern. Salmon are predators and feed on plankton, small crustaceans, aquatic insects, and other fish.

Scott Sanders

Fishing allocation and management within the borders of Washington State is currently rooted in the 1974 U.S. v Washington, commonly referred to as the Boldt Decision, a US District Court ruling won after years of committed activism by Native people in Nisqually and beyond. For decades, Native people were beaten, gassed, and jailed, with their fishing equipment routinely taken and destroyed, by WA state officers trying to prevent tribal members from exercising their treaty rights.

The Boldt Decision reaffirmed the fishing rights reserved in treaties between WA state Tribes and the U.S government and established the Tribes as co-managers of the resource with the State of Washington. This court decision determined that WA Treaty Tribes have a right to catch 50% of the harvestable surplus of each salmon run passing through their usual and accustomed areas (U&As). This ruling was later extended to include other species of fish and shellfish.

From the Boldt decision, the Treaty tribes and WA State became co-managers of the region's fisheries with the job of managing the resource jointly. The co-managers must agree every year on fishing season and hatchery goals within Washington State. They also collaborate in the recovery of depressed stocks for future generations. Pacific salmon populations have been decimated during the past several decades, most notably due to hydropower, overharvest, habitat destruction, and other factors. Careful management of the resource and its habitat is essential for any hope of continued runs into the future.

The Nisqually Fish Commission is an elected body of the Nisqually Indian Tribe. The Commission's responsibility, as defined in the Nisqually Tribe's Tribal code 14, is to "formulate and enact Emergency Fishing Regulations for the management and conservation of the fishery resource, including the achievement of the tribal management objectives". Fishing seasons each year are limited by allowable harvest defined by particular management objectives. The co-managers come together each Winter through Spring for a series of meetings, known as the North of Falcon and Pacific Fisheries Management Council processes, and set the allowable harvest of each species for the coming year.

Aaron Squally

Nisqually Tribal Members harvest salmon commercially and for ceremonial and subsistence use. The definition of a Ceremonial and Subsistence (C&S) fishery, as defined in the Boldt Decision, is:

> Ceremonial: Traditional tribal ceremonies
> Subsistence: Personal subsistence consumption by tribal members and their immediate families.

Any enrolled member of the Nisqually Tribe can engage in C&S fishing, but needs to request a special subsistence card as per the regulations set by the Nisqually Fish Commission. Commercial fishers must register for a fisher identification card. There are separate regulations for commercial and C&S fishing, which are set by the Commission each year. There are approximately 30 boats captained by Nisqually tribal members that go out regularly to fish.

The Salmon Harvest Program oversees Chinook, Pink, Coho, and Chum salmon runs, as well as Steelhead. The usual timing of these runs is below:

Chinook	July-October
Pink	August-October
Coho	Late August-December
Chum	Late November-February
Steelhead	December-May

The Nisqually Tribe also operates two hatcheries - Clear Creek Hatchery and Kalama Creek Hatchery - that release Hatchery Chinook and Hatchery Coho salmon into the Nisqually River.

Neugen Kautz

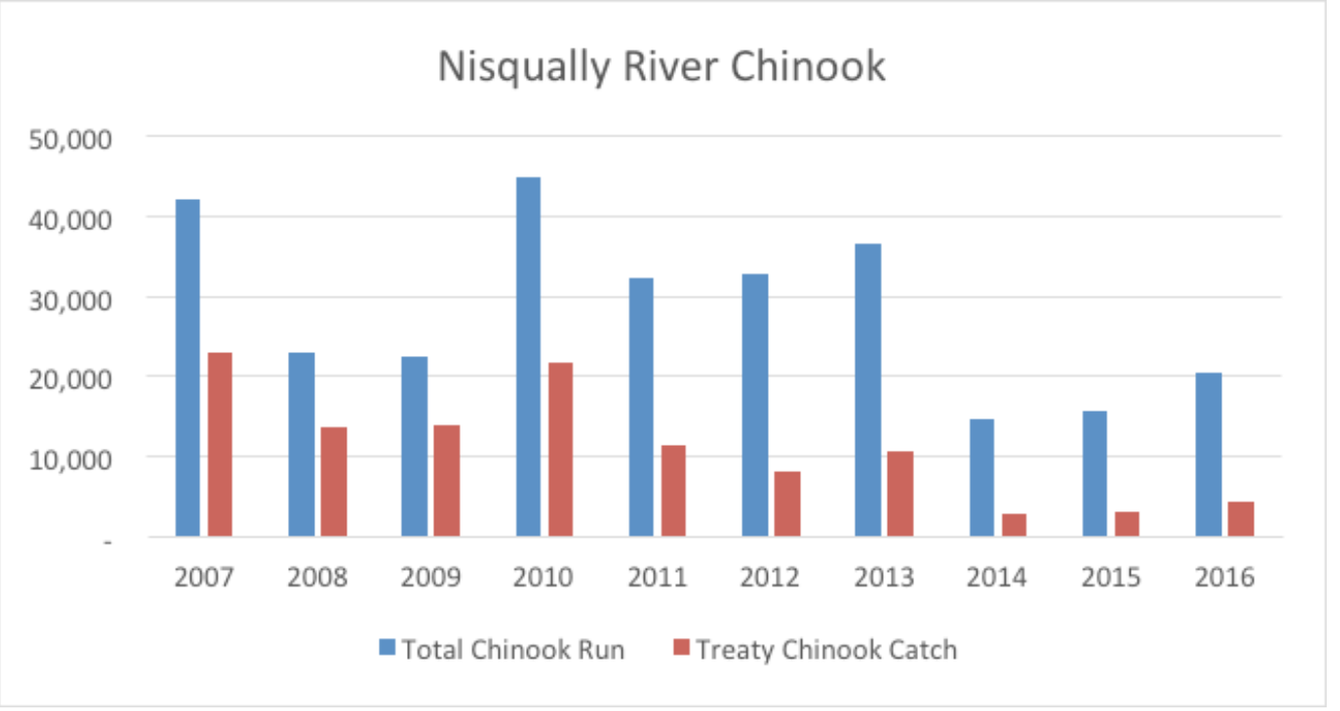
Mike Sanders
With Chinook

CHINOOK

Chinook is the largest Pacific salmon species. After entering the ocean, they can remain as little as 2 months or as long as 6 years. Chinook, also known as “Kings”, enter the Nisqually River in July-October. Spawning generally occurs September-November in the mainstem of the Nisqually River and the lower regions of the Mashel River and Ohop Creek. Nisqually River sub-yearling chinook generally rear in the river system for about three to six months before migrating to saltwater. Nisqually River yearlings rear in the river system one plus years before migrating to saltwater.

Chinook salmon have the longest life span of the Pacific salmon and can grow as large as adult humans: over 100 pounds! Their average commercial weight is 11 pounds, with a range of 5-35 pounds in the Nisqually River.

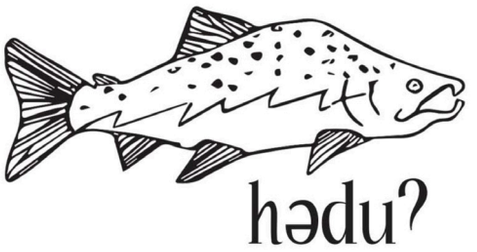
Chinook are listed as threatened under the Endangered Species Act (ESA). Due to this designation, any fisheries harvesting or incidentally impacting Chinook must be covered by the 4(d) rule, granted by the Federal Government, which allows the “take” of a listed species. Program staff work diligently each year to ensure that Nisqually tribal members can still fish this important traditional species, while managing closely not to violate the ESA.



The Nisqually Chinook fishery is one of the largest Treaty Chinook fisheries in the Puget Sound Region. Wild Nisqually genetic chinook is extinct due to dams, overharvest, and habitat destruction. However, Clear Creek Hatchery and Kalama Creek Hatchery raise and release Chinook into the Nisqually River, and a small wild run of Chinook that are strays from these facilities make it to the spawning ground. Because of the very healthy habitat in the Nisqually Watershed, the National Oceanic and Atmospheric Administration (NOAA) has determined that the natural spawning of this run is critical to its successful recovery, which is in turn critical to sustaining the region's Evolutionary Significant Unit (ESU). The ESU is a unit of 22 Chinook populations remaining within the Puget Sound and Hood Canal that has been deemed essential for overall recovery. This means that the Chinook in the Nisqually River could help sustain the region's Chinook if there was environmental catastrophe within the region's other populations. Before dams and extirpation, the genetically wild Nisqually Chinook run was in the Spring and Summer. The Nisqually Chinook run is now a Fall run.

Chinook salmon has a high fat content and is rich in omega-3 oil. The flesh ranges from nearly white to pink to deep red. Its velvety texture and rich flavor and are the considered one of the most delicious of the Pacific salmon species. However, Nisqually Chinook are also the most contaminated of all Puget Sound Chinook Salmon due to the distance they travel out and in the Puget Sound, allowing a longer time for bioaccumulation of pollutants.

PINK

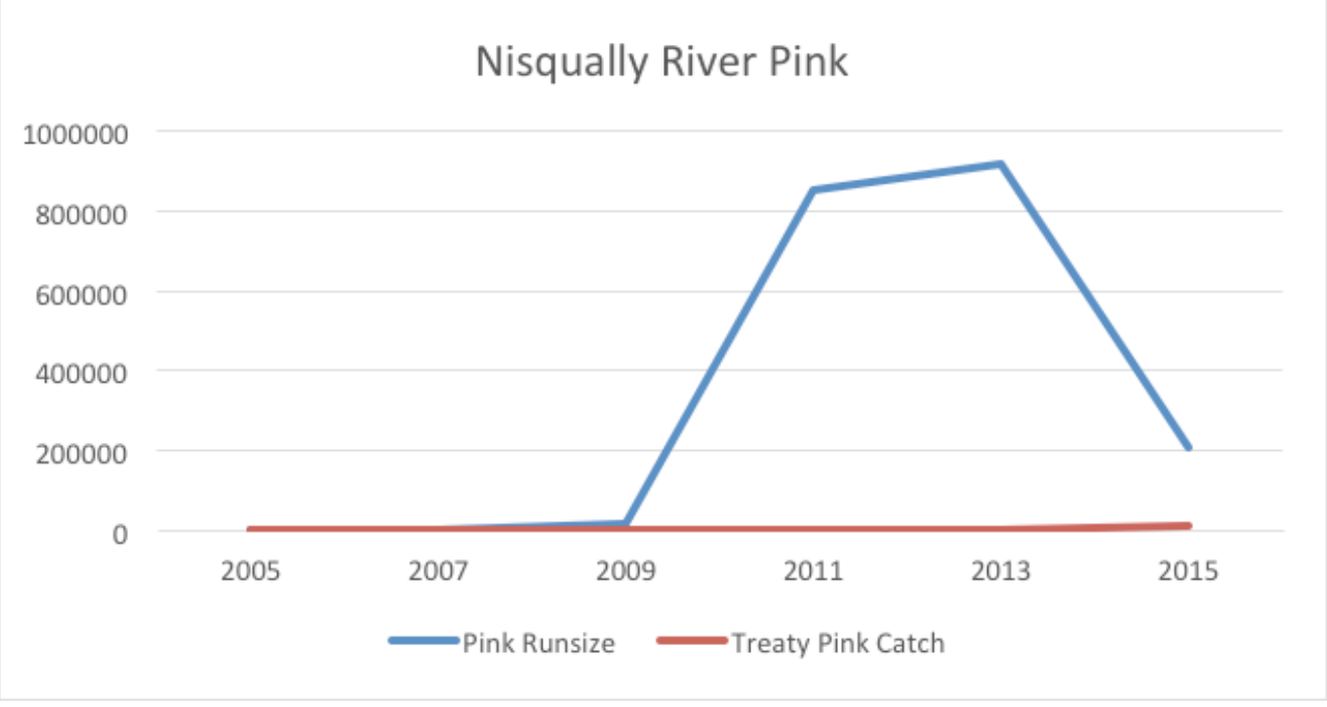


Pink salmon enter their spawning grounds from August-October every two years. They spawn primarily in the mainstem of the Nisqually River, but also in Ohop Creek, Yelm Creek, and Mashel River.

Juvenile pink salmon feed mostly on plankton. Nisqually pinks are fished in the Strait of Juan de Fuca, the Puget Sound, and the Nisqually River; the commercial market is supported by dog and cat food producers. Pinks are not very prized for culinary use, but they can be prepared and enjoyed many ways. Traditionally, pink salmon were very important to the Nisqually People and were eaten fresh instead of smoked.

Pink salmon runs occur every odd year. Pink catch in the Nisqually River is incidental to the directed Chinook fishery. By the time pinks enter the river, their bodies start to deteriorate in preparation for spawning and males develop large humps, giving them the nickname “humpies”. When they have humped out, they are no longer marketable. The pink run arrives during the latter half of the Chinook run, so fishers target the Chinook with a larger mesh size and the pinks slip through.

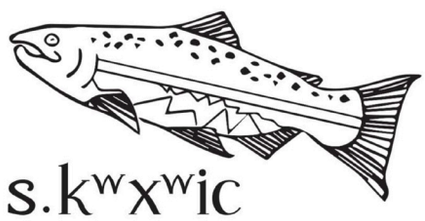
Pink runs can be astoundingly huge. In 2013, the total Nisqually Pink run was 917,573 – almost a million fish! In 2015, the total Nisqually Pink run size was 204,200, and the treaty Pink catch was 10,171.



Mariah Kautz With Chinook

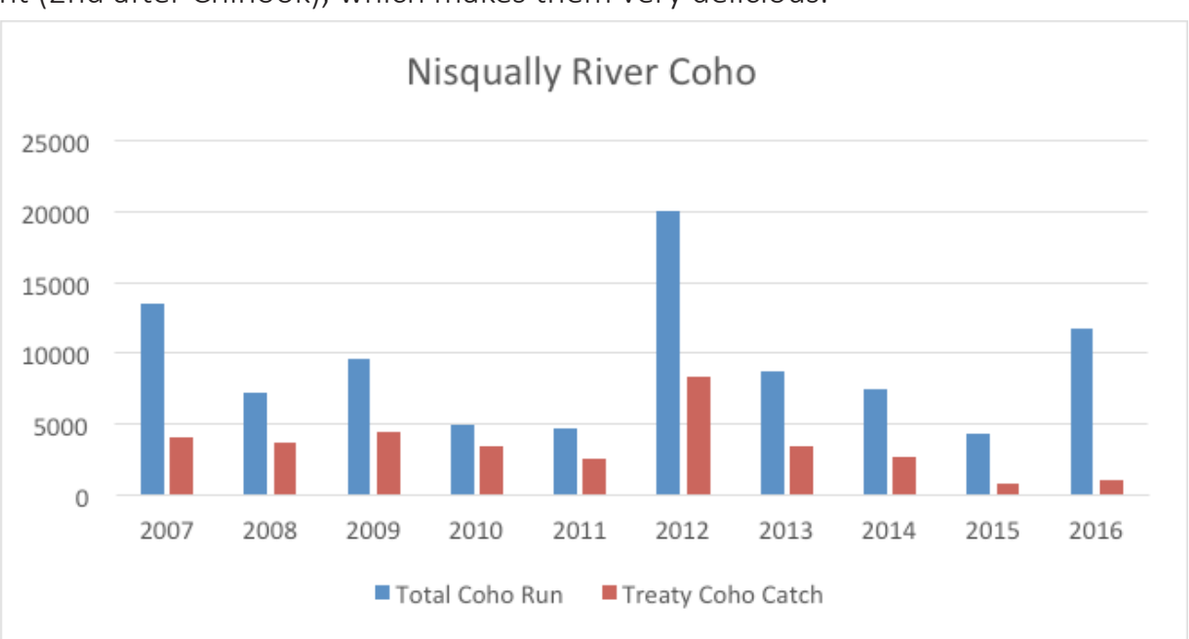
COHO

Coho salmon are also known as “silvers”. Cohos enter the Nisqually River between July-December. They spawn from November-early February in almost all accessible streams in the Nisqually basin. After emerging, juvenile Coho remain in the river system for over a year before migrating to saltwater.

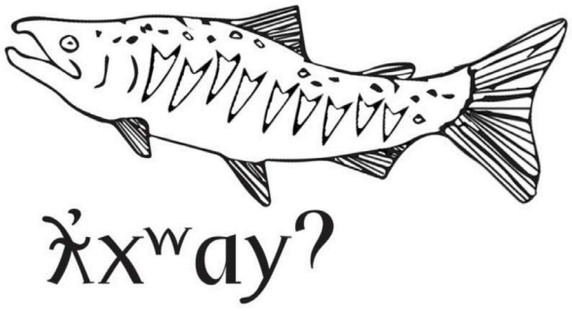


In their freshwater stages, Coho feed on insects, then switch to a diet of small fish upon entering the ocean as adults. They spawn in small streams with stable gravel substrates. Clear Creek and Kalama Creek hatcheries raise and release Coho into the Nisqually River system.

Wild Coho salmon are large and can grow up to 30 pounds. Nisqually Hatchery Coho are very small (3-5 lbs) and are sometimes not marketable. Their meat is red and has high oil content (2nd after Chinook), which makes them very delicious.



CHUM



The Nisqually River has the latest chum run on the West Coast, and one of the latest runs on the planet. The chum run has been very important throughout history, because it has sustained Nisqually people through the long wet Winter when other foods are less available. The winter chum run is generally Late November through February and is an entirely wild run of salmon that has supported families for generations. The co-managers must manage this unique run very carefully to make sure a critical mass of chum can spawn each year. Run numbers are increasingly threatened by incidental preterminal harvest during the Fall Chum Run and predators, such as sea lions and harbor seals.

Winter chum enter the Nisqually River between Late November-February. They spawn from December to early March, mostly in the Nisqually River mainstem, Muck Creek, Red Salmon Creek, Mounts Creek, and McAllister Creek. Adult chum generally return to the streams where they were born between the ages of 3-5 but are predominantly age 3 & 4.

In 2016, there was no commercial Nisqually chum fishery because of conservation concerns. Due to forecast concerns, there is no planned commercial fishery in 2017 unless the escapement is projected to be met. However, there has been a C&S fishery that allows tribal members to provide for their families, while not harming efforts to restore the overall population.

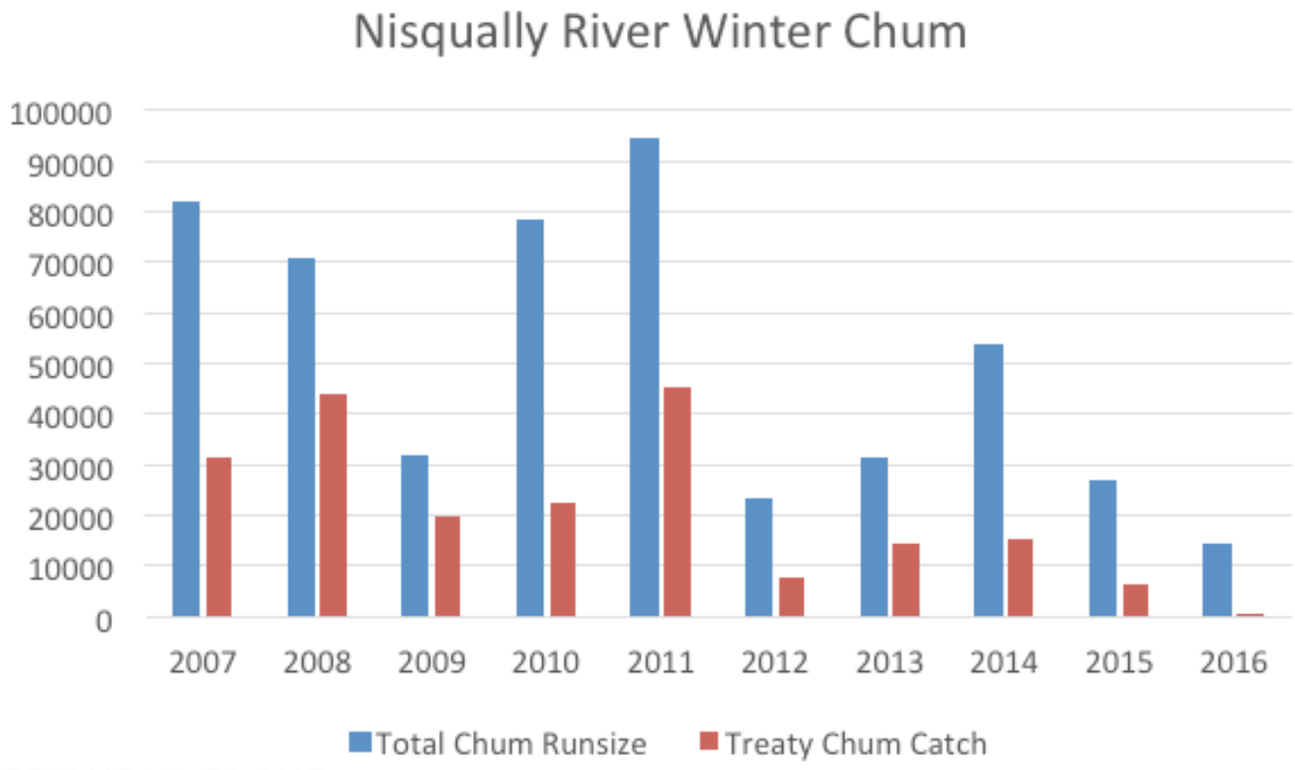
The table below shows the dramatic drop in run size between 2014-2016:

	Treaty Catch	Total Run Size
2014	15,418	53,716
2015	6,359	26,514
2016	378	14,328

"Winter chum has historically been the most important stock, culturally and economically, to the Nisqually Tribe. We want to make sure enough salmon make it up the river to spawn." – Farron McCloud, chair of the Nisqually Tribe, on closing the commercial fishery in 2016

Reuben Wells Jr.
With Winter Late Chum

Chum meat is bright, fresh, and delicious, and the roe (eggs) has been the most important product for commercial sale. Chum meat has less oil, and is therefore dryer than either Coho or Chinook. However, Chum has the most Omega 3 fatty acids, making it the most nutritious and healthy salmon to eat. Because it spends the least time in freshwater and Puget Sound and grows mostly in the ocean, it also has the least contaminates of any Nisqually Salmon. The Chum is the most desirable fish for smoking and long term storage.



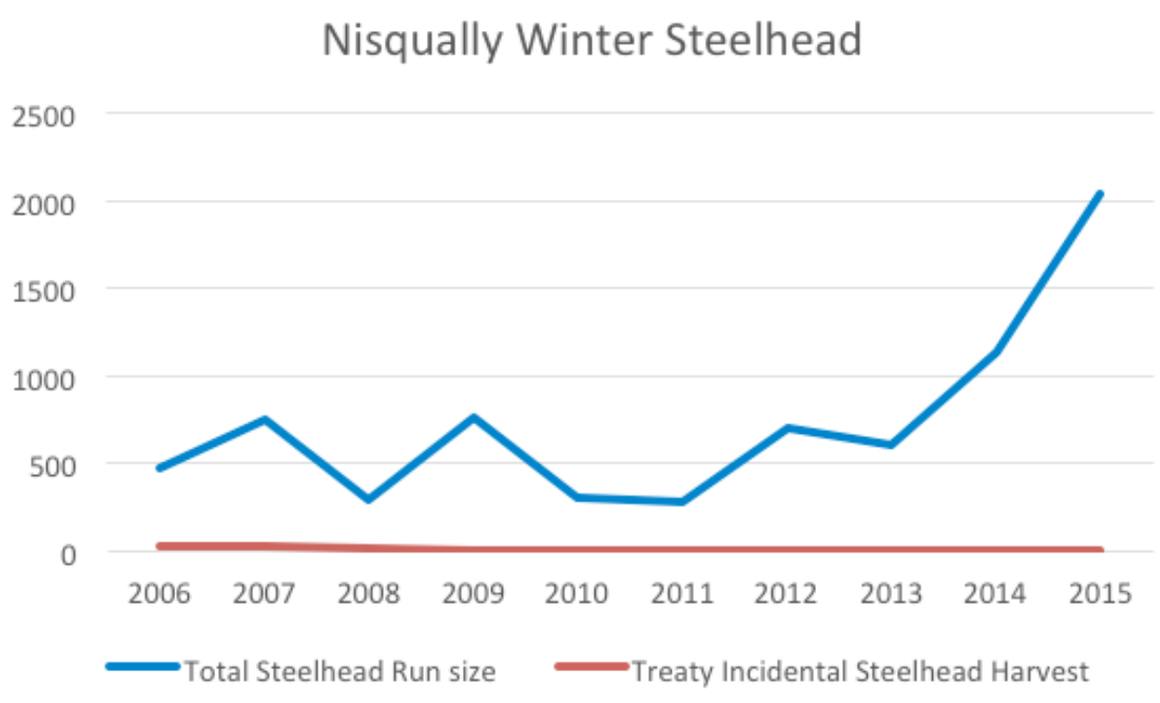
STEELHEAD TROUT

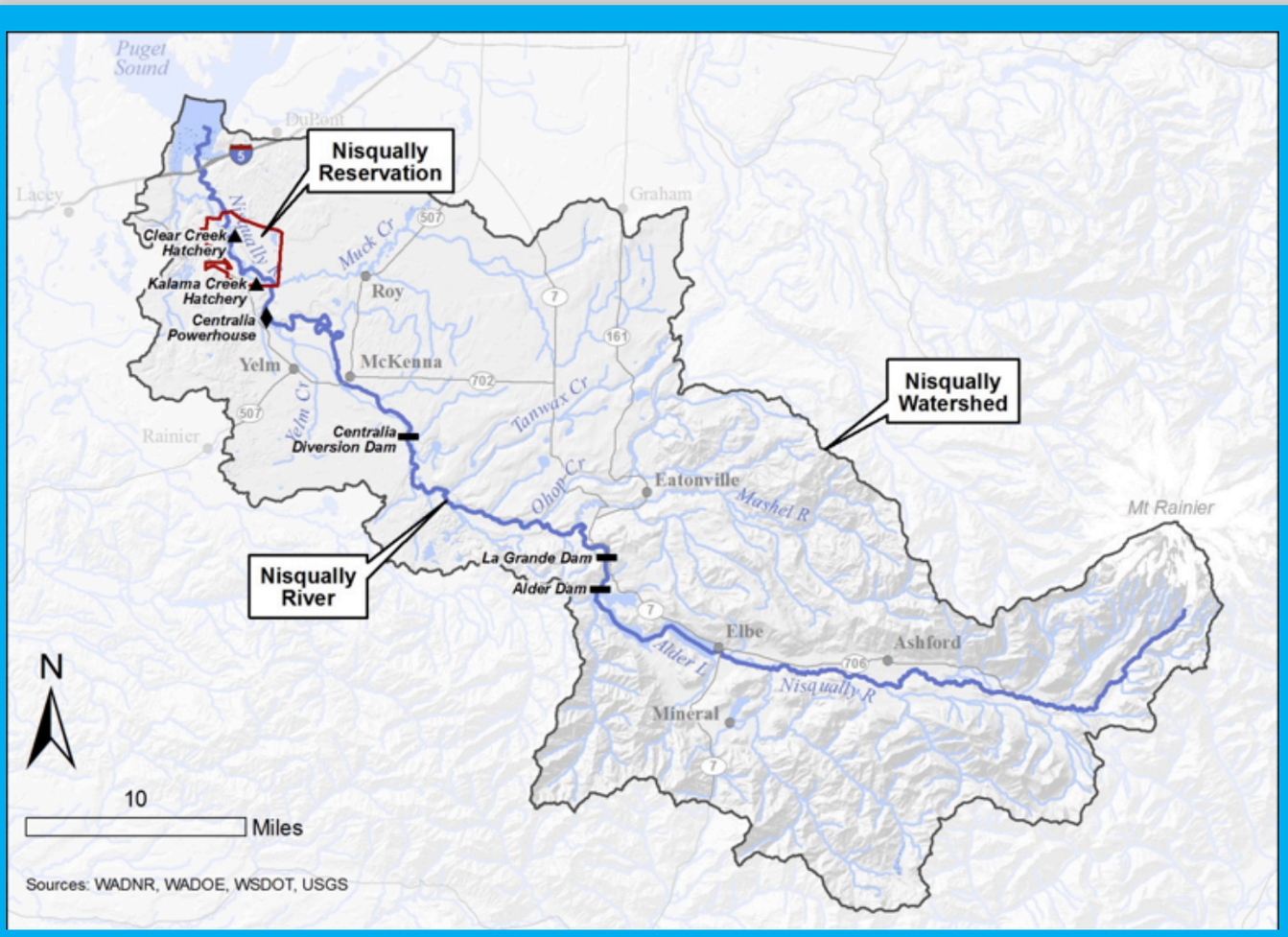
Steelhead Trout and Rainbow Trout are actually the same species: Rainbow are the freshwater form, and steelhead are the anadromous form. Steelhead in the Nisqually are listed as Threatened under the ESA.

Steelhead can weigh up to 40 pounds, but have an average size of 8-11 pounds. Steelhead spawn in Spring and prefer fast water in mainstem rivers and medium to large tributaries. Steelhead young rear in the freshwater 1, 2, and 3 years and use small tributaries to grow large before migrating to sea. Unlike most salmon, steelhead can survive spawning, return to the saltwater, and can spawn in multiple years. The Nisqually Steelhead run is generally from December-May.

Steelhead is not currently fished in the Nisqually River, because the run sizes are not large enough to support a sustainable fishery. A recent uptick in abundance is a sign that Steelhead are headed in a positive direction. Habitat in the Nisqually River is healthy compared to the rest of the Puget Sound rivers. The major challenge for the Steelhead is early marine survival, where predation, mostly by sea mammals, and lack of protected shoreline hamper survival.

Emiliano “Nano” Perez and Craig Smith





This map shows the Nisqually River: its glacial headwaters on Mt. Rainier, the dams along its length, where it runs through the Nisqually Reservation, the Tribe's two hatcheries, and where it enters the Puget Sound. Cartography by: J Cutler, Nisqually Indian Tribe 2017

SUMMARY

Fishing has always been incredibly important to the Nisqually People and continues to this day. As habitat and fishing pressures change, careful management is a must to maintain healthy stocks and fisheries. Recovery objectives, fueled by habitat destruction, put harvest on the cutting line. Harvest Managment is constantly adjusting to provide fishing opportunities, while meeting management objectives and program goals. If managment objectives are not met, permits to harvest a listed species will not be granted, therefore threatening planned fisheries. The data that the Harvest Progam has diligently and consistently collected, analyzed, and reported keeps the Treaty Fishery on the water and will continue to provide tribal members with the opportunity to sustainably harvest fin fish in their usual and accustomed area into the future.

Wild Shellfish

WILD SHELLFISH MANAGEMENT PROGRAM

The Shellfish Management Program surveys wild shellfish harvest areas and provides maps, information, and regulatory guidance for harvesting in those areas. The program estimates the abundance of crab, geoduck, and other species and calculates how much of each Nisqually tribal members can harvest sustainably.

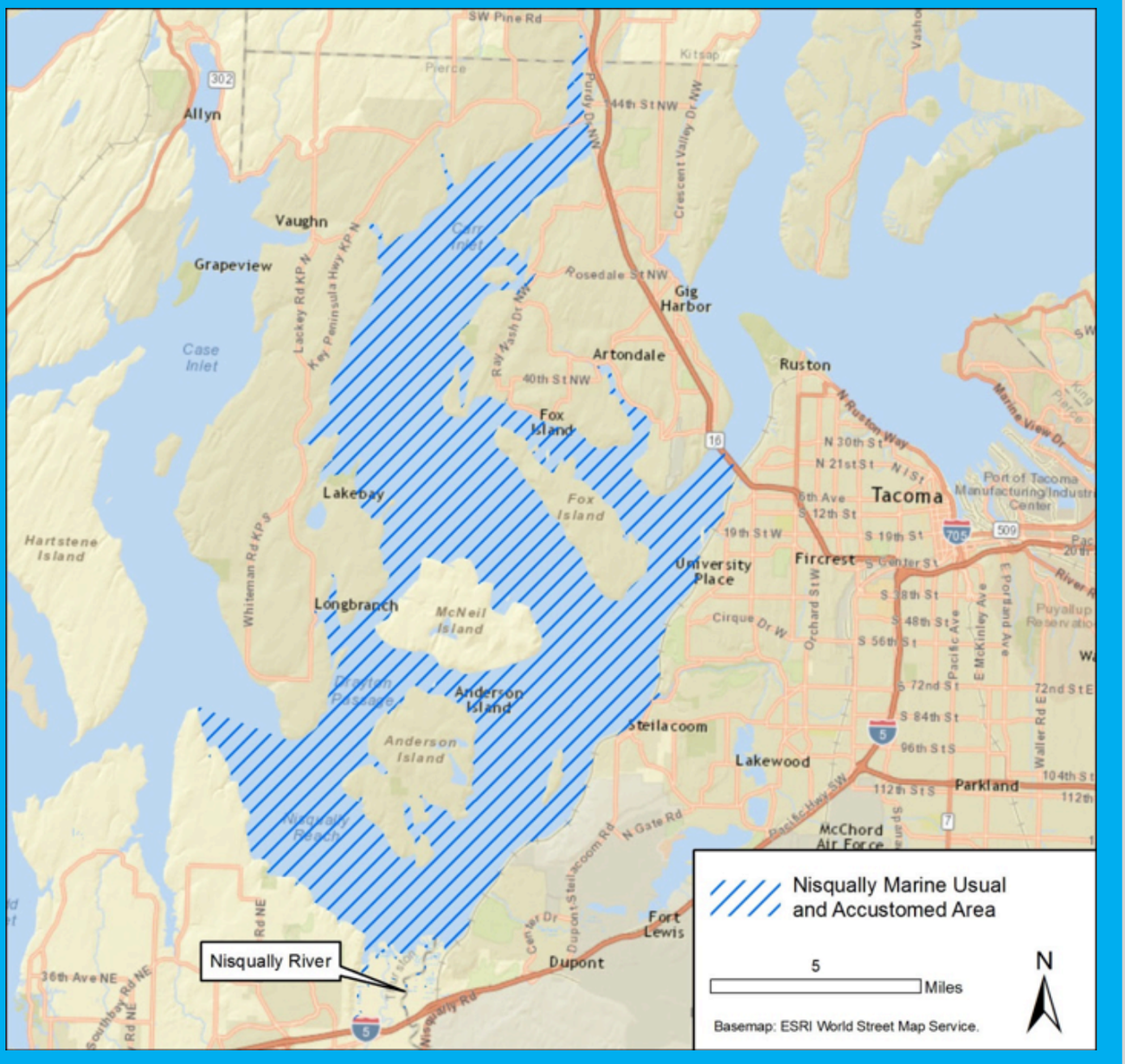
Nisqually tribal members harvest shellfish both commercially and for ceremonial and subsistence use (C&S). These distinct uses have different regulations and limits, which are set each year by the Nisqually Fish Commission, working under the regulations set by all co-managing agencies. These agencies include Treaty Tribes, Washington State, and the federal government. WA Treaty Tribes and WA State are each allocated half of the state's annual wild shellfish harvest.

Twenty WA Treaty Tribes share co-management of the state's shellfish harvest. Each tribe has a usual and accustomed area (U&A), which is where shellfish were historically collected by members of the Tribe. All tidelands in the Puget Sound are within the U&A of one or more Tribe.

Most shellfish-rich tidelands in the Nisqually Tribe's U&A were sold by the state to private owners in the 1800s & 1900s. Essentially, private shellfish companies bought up the best habitat, and now these commercial shellfish farms are not accessible to tribal members. Additionally, Tribal members used to harvest on the Braget farm tidelands, but that area is polluted because of the railroad tracks and trestle that were built in 1911, and the shellfish habitat was further decimated by the dikes that were built several years later.

Consequently, the remaining productive shellfish beds in the Nisqually Tribe's U&A are on public and private lands accessible only by boat. Harvesting therefore requires an expensive investment in specialized equipment. As a result, most Tribal Members only make that investment if they are harvesting commercially.

Tribal members can harvest anywhere on state lands for harvest and are not limited to the Tribe's U&A. However, when harvesting on public lands outside of the U&A, tribal members must follow state guidelines and limits. U&A Beaches are open for tribal members year-round, but areas outside the U&A and managed by the state are only open during set seasons. Nisqually Tribal members don't need a state license to harvest in their U&A but should have a subsistence card, available free of charge from the Nisqually Natural Resources office.



The Nisqually Tribe's Marine U&A in the South Puget Sound. Cartography by: J Cutler, Nisqually Indian Tribe 2017

Tribal members can also harvest from privately-owned, non-commercial tidelands, but must notify private property owners of their intent to harvest. Tribal members can contact the Shellfish Program manager for more information & assistance notifying property owners.

Regulations, maps, and a list of which beaches statewide are currently open and closed are posted in the Tribe's Natural Resources office. The Shellfish Management Program posts an article in the tribal newsletter when each harvest season opens. Harvesters are asked to report their harvests to the Shellfish Program manager so that wild shellfish populations can be maintained.

There are approximately 80 Nisqually Tribal Members who are commercial geoduck harvesters, 14 commercial crab harvesters, and 3 shrimp harvesters. Commercial harvesters sell to distributors, who sell and ship to commercial buyers. There are approximately 6 Nisqually tribal members who harvest shellfish for subsistence on a regular basis. Geoduck and Dungeness crab are the primary shellfish species that Nisqually Tribal Members harvest commercially.

There are approximately 80 Nisqually Tribal Members who are commercial geoduck harvesters,14 commercial crab harvesters, and 3 shrimp harvesters.

GEODUCK

Pacific geoducks are native to the Pacific Northwest and get their common name from the Lushootseed word gʷídəq. The geoduck is the largest burrowing clam in the world. Commercially harvested geoducks average 2 pounds in weight, although they can weigh over 15 pounds and extend over 6 feet long. Geoducks are also one of the longest-living animals, with a lifespan of 140+ years.

Most tribally-harvested geoducks are gathered by scuba diving. Divers must undergo extensive safety training before going out to harvest. **Approximately 90% of the Nisqually geoduck harvest goes to China and Hong Kong, while 10% stays in the US for local markets.** In China, geoduck can sell for over $150/pound.

The siphon of the geoduck contains most of its meat and has a crisp texture and savory flavor. It can be served raw or cooked. The geoduck body has a milder taste and can be pan fried, steamed, or cooked. In Nisqually, geoduck is often used to make a delicious chowder.

DUNGENESS CRAB

Dungeness crabs are native to the west coast of North America and get their common name from Dungeness on Washington's Olympic Peninsula. Dungeness crabs are the most commercially important species of crab in the Pacific Northwest.

Harvested Dungeness crabs measure an average of 6-10 inches across and generally weigh between 2-3 pounds. Their meat is tender and sweet. Dungeness crabs need eelgrass beds and estuary habitat for the early part of their lifecycle. Mature Dungeness live subtidally in saltwater, but can live in estuary environments as well. **Approximately 80% of the Nisqually commercial Dungeness crab harvest is sold overseas.**

Hunting

Nisqually tribal members and their ancestors have hunted since time immemorial. Hunting rights were reserved by the Nisqually Tribe in the Medicine Creek Treaty of 1854:

"The right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory…together with the privilege of hunting, gathering roots and berries, and pasturing their horses on open and unclaimed lands…"

Nisqually is one of 24 tribes with off-reservation hunting rights in WA state. Below is a map of the Medicine Creek ceded area, used by the Nisqually Tribe to determine where tribal members exercise their hunting rights. It is for reference only and does not define the Tribe's traditional hunting areas.

Hunting regulations are set each year by the Nisqually Fish Commission. Nisqually tribal members generally hunt deer or elk, although allowed species include mountain goat, black bear, cougar, upland birds, waterfowl, and furbearing animals. The hunting season for elk and deer is usually August – February, and the first month of the season is usually bull or buck (male elk and deer) only. After that, hunters can harvest animals of either sex.

There are approximately 20 Nisqually tribal members who hunt on a regular basis. The majority are men, but there are several women who hunt. Most tribal members learn to hunt from their family, which is traditional. Nisqually tribal hunters generally hunt with guns, rather than bowhunting.

There are no limits to how many elk or deer tribal hunters can harvest in the Tribe's ceded area, but hunters do need to get tags first from Nisqually's Natural Resources Department.

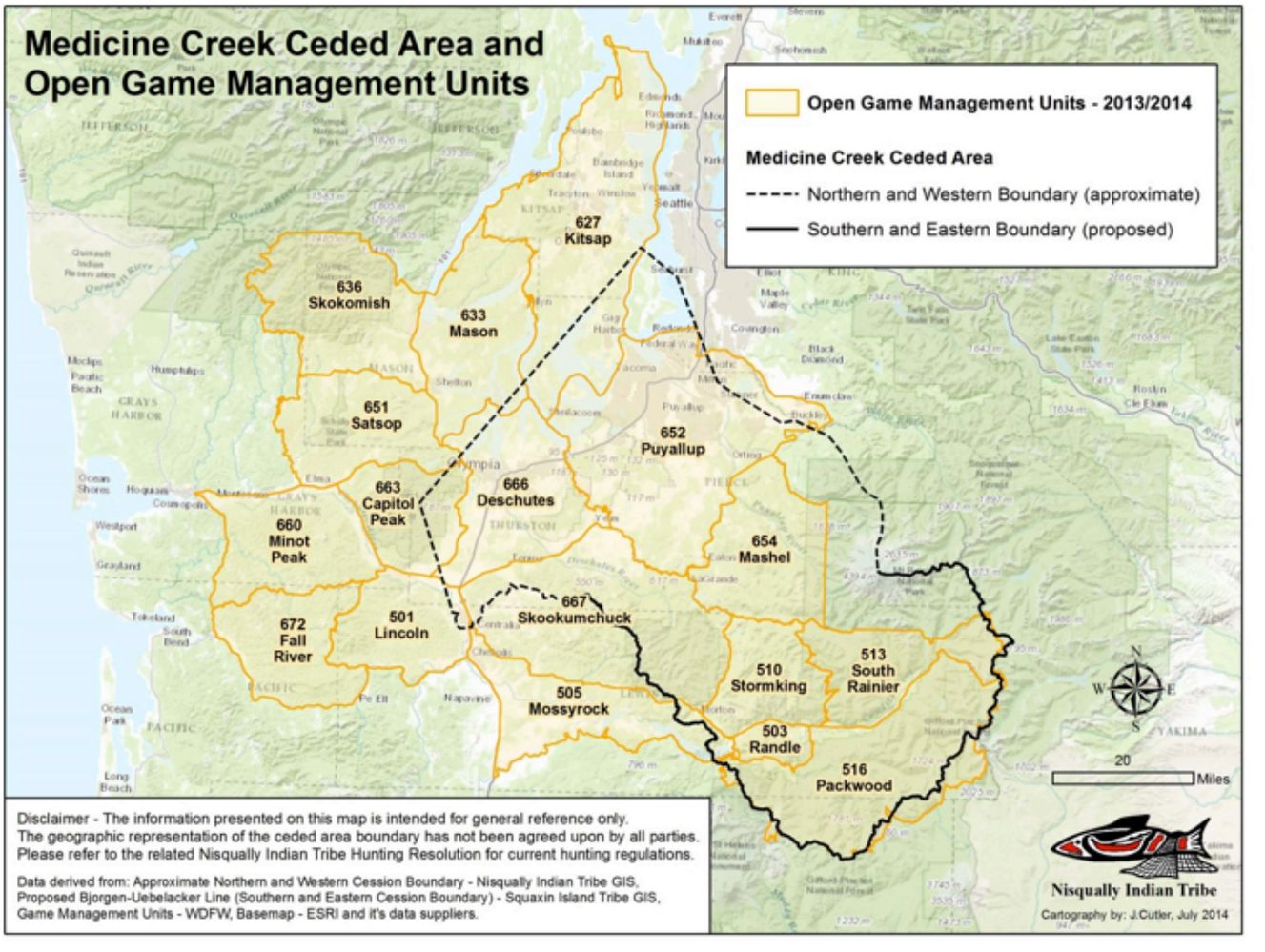
"Hunting time is family time, and it's tradition. I have learned from my dad, my daughter has learned from me and I hope my daughter passes the tradition to her children." - Julie Palm

Each hunter may have no more than one deer tag, one elk tag, one bear tag, and one goat tag in their possession at one time. When an animal is killed, hunters must submit a detailed information report card to Nisqually Natural Resources immediately following the hunt. Tribal members can also hunt outside the Tribe's ceded area, but must purchase WA state tags when doing so, and must follow WA state regulations when hunting with a state tag.

Many tribal members skin, clean, and cut the meat from the animals they hunt with their families. Others may bring the animals to commercial butchers to process their meat. There is no facility on the reservation for tribal members to process the animals they hunt.

When a tribal or community member passes, it is traditional to send a hunter out to harvest an elk or deer for services. Hunters will harvest animals for Elders, but otherwise generally just try to fill their own freezers and feed their families. Tribal members hunt for subsistence and ceremonial purposes only. The commercial sale of hunted animals is expressly forbidden.

Please see the Appendix for details in the Niqually Indian Tribe's 2017/2018 Hunting Resolution.



She Nah Nam Seafoood

She Nah Nam Seafood was created by Tribal Council in August 2012 to help tribal fishers get a better price for their product. Their mission is to sustain Tribal Treaty Rights through salmon, seafood, and other Native-harvested and manufactured products. Over the last five years, She Nah Nam Seafood has successfully integrated the salmon supply chain from river to plate in Nisqually: tribal members and the tribal government now control each step in the chain, from the river, to initial purchasing, processing, distribution to outlets, and direct sales to consumers.

On the river, She Nah Nam Seafood offers premium prices to tribal fishers for their catch and ensures those prices stay consistent throughout the fishing season for the different grades and qualities of salmon.

She Nah Nam Seafood also distributes seafood to local, national, and international buyers, does direct sales from its processing facility and Nisqually Markets, and processes fish from Tribal fishers at discounted to no cost. Additionally, She Nah Nam Seafood offers a range of Native-harvested and manufactured products from across the United States, including other seafood, bison, wild rice, grain corn, beans, jerky, olive oil, vinegar, and more (see Appendix for a detailed product list).

BUYING DIRECT FROM TRIBAL MEMBERS

Nisqually tribal members can sell to any buyer they choose. She Nah Nam Seafood purchases fish from Tribal fishers for 24-100% more than other commercial buyers. They also have 2nd tier pricing to buy salmon at the end of the season, which may not be of the same quality. Prior to She Nah Nam Seafood, fish buyers on the river could collude on pricing as the season progressed to drive down prices for tribal fishers. She Nah Nam Seafood keeps a set price throughout the season for the various grades and qualities of salmon to make sure that tribal members get a consistently fair price for their catch. This provides a benefit for all fishers: it drives up the prices even for fishers who sell to other buyers, who must keep their prices higher to stay competitive and procure the resource. In 2015, She Nah Nam Seafood purchased salmon from approximately 27 Nisqually fishers. (See Appendix for detailed salmon purchasing numbers).

She Nah Nam also buys lower grade geoducks from Nisqually divers. Divers get an average of $9 - $13/pound for 1-2 grade geoducks from commercial buyers. These buyers, however, generally don't buy 3-4 grade geoducks, leaving divers with no market to sell to. She Nah Nam Seafood buys them for $2/lb to give divers an alternative to taking these lower grade geoducks home for family use. She Nah Nam shucks and minces the lower grades into a geoduck chowder base, which is sold to the Red Wind Casino and other outlets.

She Nah Nam Seafood also buys salmon and other finfish from most other WA fishing tribes. They also work with Salish Seafood (Squaxin) to source shellfish products. She Nah Nam Seafood purchases oysters from the Nisqually Shellfish farm: approximately 200-300 dozen oysters a week are distributed to restaurants in Portland. For the three months each summer that the Nisqually shellfish farm doesn't harvest (because of weather-induced safety issues), they get oysters from Salish Seafood and other Tribal oyster providers.

PROCESSING

She Nah Nam's processing facility for salmon and seafood is fully HACCP certified. The facility will process Nisqually fishers' ceremonial and subsistence harvest (C&S) for free. They will process Nisqually fishers' commercial catch at a discounted rate of $1-$1.50 / pound. They also offer seafood processing services to other tribes, such as Muckleshoot, Puyallup, and Chehalis.

DISTRIBUTION AND SALES

She Nah Nam Seafood purchases salmon and seafood from over 16 fishing Tribes from the NW and Alaska. There is no middleman, which cuts costs to stay competitive. She Nah Nam currently sells some of the salmon and other finfish products for several dollars less than conventional distributors. They also sell seafood with the story of the tribal fisheries behind it. This is an important value added to their products.

Sugar Frank

She Nah Nam Seafood sells approximately 150,000 pounds of salmon each year. This includes 93,000 pounds from Nisqually fishers in 2015 and 163,000 pounds from Nisqually fishers in 2013.

The company sells both wholesale and directly to the end user. They distribute to 10 Casinos weekly, with 24 casino clients total in the Northwest, California, and Arizona. They distribute through the Doyles Sheehan distribution group and Harbor Wholesale Foods, suppliers of food for convenience stores and restaurants throughout WA State. She Nah Nam also sells directly to restaurants in Olympia and Portland and does direct sales to consumers from their processing facility.

Approx. 60-70% of She Nah Nam's sales are in Washington state. Their out of state sales are mostly to California casinos. They also sell to Mexico: buyers in the NW usually do not want to purchase Chum salmon, so they sell pale Chum to resorts in Cancun and Mazatlán, where it is used for ceviche and other Mexican dishes.

Commercially, Nisqually's Red Wind Casino is their biggest single account by far. Prior to She Nah Nam Seafood, Red Wind Casino purchased a great majority of their seafood from non-tribal vendors, with salmon often coming from farm raised pens locally and from other countries. Now, She Nah Nam Seafood sells approximately $130,000 / month in sales to Red Wind. They do about $4,000 / month in sales to Nisqually Markets (the six convenience stores owned and operated by the Tribe). She Nah Nam also donates about $30,000 of salmon and seafood product to Nisqually and other Tribes, and sells about $40,000 worth of seafood each year to Nisqually Tribal programs. **She Nah Nam's total sales per month average between $250,000 and $500,000.**

Since the majority of She Nah Nam's sales are with Red Wind Casino, Nisqually Markets, and tribal programs combined, the business has been able to successfully capture the full economic value at each point in the value chain for Nisqually tribal members: purchase from tribal fishers (at river), processing in-house (at facility), distribution to tribal vendors (casino, convenience stores, tribal programs), and final sale to consumers. This holistic control of the supply chain is profoundly valuable and provides a strong model for other programs both within and beyond the Nisqually Tribe.

Harold Ikebe

Community Garden

The Nisqually Community Garden is a program of the Tribe's Community Services Department. Tribal Council established the program in 2009 in response to tribal members' demand for a garden to increase the availability of fresh produce, traditional foods, and medicinal plants.

The Nisqually Community Garden consists of 5 acres of vegetables, berries, traditional plants, and fruit trees. All produce is distributed directly to Nisqually Tribal members, staff, and community. The garden also hosts youth field trips and community classes on cooking, food preservation, medicine making, gardening, and harvesting traditional plants.

Additionally, the garden partners with many tribal programs and has built and maintained onsite garden beds at the Nisqually Tribe's Elders, Daycare, Youth, and Headstart programs. The garden's annual Fall Harvest Dinner offers foods from the garden and She Nah Nam Seafood and features an annual giveaway of plant-based body care products, teas, and storage vegetables for the winter. The program also organizes trips to the forests, rivers, prairies, and mountains to collect traditional plants such as nettles, camas, devils club, cottonwood buds, and others.

Planting Blueberries

Tribal members, staff, and community members can get produce July-October at a weekly produce stand at the Tribal Center. Fruits and vegetables are free or by donation. Tribal members can also harvest directly from the Garden. Weekly garden deliveries are made to the Elders Center and Daycare April-December. Families with children in Head Start and Early Head Start are also eligible to receive a free weekly bag of produce from the garden during the growing season. The Garden is currently considering new distribution methods, such as weekly produce bag delivery, to all interested Tribal members.

The Nisqually Community Garden distributes an average of 7,000 pounds of produce annually, and has distributed more than 50,000 pounds of produce to the Nisqually community since the program began. Demand for the garden's produce now exceeds what can be grown in the current location. Therefore, the program is currently preparing another 8 acres for cultivation, to provide more nutritious foods for the Nisqually community.

Grace Ann Byrd and Janell Blacketer & Youth planting the Head Start garden

Justin Charley & Robert Prante planting oysters at the shellfish farm

Nisqually Shellfish Farm

The Nisqually Shellfish Farm was established in 2010 to grow and distribute shellfish as a commercial enterprise for the benefit of Nisqually tribal members. The farm produces Pacific oysters and Manila clams.

The Shellfish farm sells directly to several distributors and restaurants. Buyers must be certified shellfish receivers with a license to resell. This means that the Nisqually Shellfish Farm can sell shellfish directly to restaurants and distributors, but they can't sell directly to individuals.

The Shellfish Farm works with distributors that ship their tumbled oysters to high-end markets in New York, Miami, Las Vegas, and Los Angeles. Their ground spread and cultch are sent to local canneries to be shucked and prepared as a bucket product, which is distributed to large-scale restaurants that use gallons of oysters in soups or stews. The farm is working to develop a larger client base and is expanding to more local sales in Olympia, Seattle, and Portland. They are also working to establish regular deliveries to the Red Wind Casino and the Nisqually Elders' program.

The Shellfish Farm is currently harvesting only oysters, since the farm's Manila clams are not yet mature for harvest. Manilla clams can live up to 14 years, but they need 2-3 years to grow to a size that is marketable (after 3 years, they are too big to sell)

Manilla clams are not native to North America, and the Shellfish Farm is seeking sources of seed for native littleneck clams. The farm is also beginning to plant out Olympia oysters, in order to provide a truly native species that would have been available 100 years ago.

In addition to commercial sales, the Shellfish Farm also provides oysters (and eventually clams) for community events. In Winter 2016-17, the Shellfish Farm started a weekly oyster stand at the Tribal Center, similar to the Garden's produce stand. Oysters were distributed at no cost / by donation to tribal members, community members, and staff on a first-come-first-served basis. This was a successful way to distribute oysters while doing community outreach about the farm's goals and products.

The Shellfish Farm also provides support for not-for-profit events, including the annual SLURP in Olympia, hosted by the Pacific Coast Shellfish Growers Association, to help fund ocean acidification research.

Red Wind Casino

The Nisqually Tribe's Red Wind casino has six restaurants: Blue Camas Buffet, Coho Sports Pub, Medicine Creek Deli, Pealo's Landing, Squalli-Absch Grille, and the Seafood Restaurant. These are the only restaurants on the Nisqually Reservation. Nisqually Tribal members, and enrolled members of other Tribes with Tribal ID, receive 50% off all restaurant purchases. For the general public, all active and retired military service members and seniors 55+ receive 25% off meals.

Approximately 4,400 tribal member meal discounts are used each month at the casino's restaurants.

The casino's catering service delivers 30-50 prepared food orders to tribal events and departments each month. Nisqually Tribal government programs receive 50% off catering and restaurant purchases from the casino. Red Wind also regularly donates food to community events, and the casino provides food donations to funerals for tribal and community families in their time of need.

Quality and consistency are the top priorities for Red Wind in sourcing ingredients. When possible, the casino tries to source their produce, seafood, and other proteins from the Pacific Northwest, depending on the season and availability.

Salmon and other seafood and products are purchased from Nisqually tribal enterprises and Tribal fishers and gatherers when available. Casino restaurants spend approximately $180,000-200,000 each month on seafood and $10,000-$15,000 each month on produce.

Here is a breakdown of how much seafood the casino restaurants purchase each month:

- Salmon: 1,600 lbs.
- Assorted Fish (Halibut, Tuna, Tilapia, Etc.): 525 lbs.
- Oysters (By Dozen): 40-60 dz.
- Clams: 1,900 lb.
- Dungeness crab: 7,800 lbs.
- King Crab: 7,200 lbs.
- Shrimp: 3,900 lbs.

The current casino facility opened in 2004, and for many years the Nisqually Tribe depended on it as a safe haven during storms and inclement weather, when power was out or roads were closed. Red Wind would maintain generator power and offer a warm, safe place for people to gather to eat. The Nisqually tribal government would authorize emergency meal service for tribal and community members. There were periods when business was too slow to stay open, but Red Wind kept their doors open for people who had no alternate means of food preparation and storage, especially Elders and Seniors, who make up a large portion of the casino's clientele.

When the Youth Center opened, and the Tribe created an Emergency Management Department, the Tribe's reliance on Red Wind's food services during inclement weather decreased, but the casino still provides meals during these times on occasion.

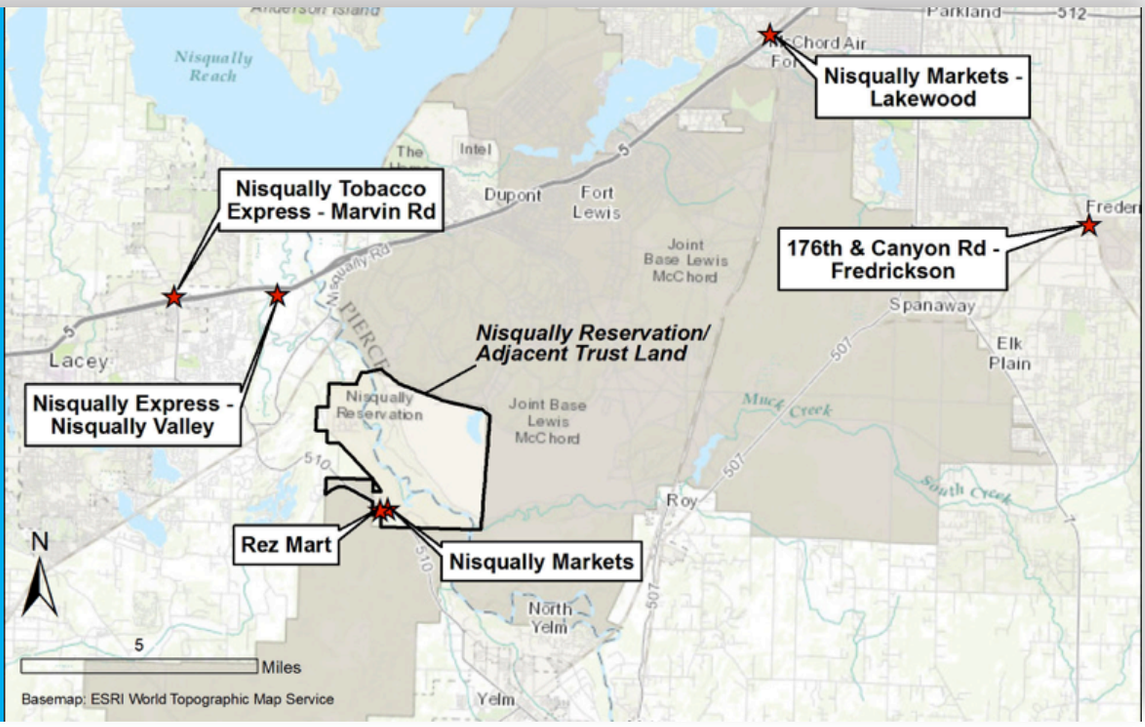
Nisqually Markets

The six Nisqually Markets locations.

Cartography by:

J Cutler, Nisqually Indian Tribe

2017



Nisqually Markets, an economic development initiative of the Nisqually Tribal Council and the Nisqually Board of Economic Development, is a growing chain of convenience stores located in the Olympia, Lakewood, and Frederickson areas. All Nisqually Markets stores were built by the Nisqually Tribe's construction firm, Nisqually Construction Services, LLC. There are six Nisqually Markets locations. They each purchase food separately and independently. The Nisqually Markets convenience store on the reservation sources most of their food through Harbor Wholesale Foods, a regional food product distribution company that serves convenience stores and restaurants. The on-reservation store offers freshly made in-house sandwiches, salads, chicken and other deli items, as well as a range of convenience foods and beverages. EBT cards are accepted at the on-reservation, Lakewood, and Frederickson locations.

Nisqually Markets also sells native-produced goods from the Tribe's She Nah Nam Seafood Company, including smoked fish, Tanka bars, wild rice, corn flour, olive oil, and jerky. Additionally, they also sell "Battle Bean Elder Roast," a bagged coffee roasted on Joint Base Lewis McChord (JBLM). This product is a collaboration between JBLM and Nisqually Markets, and a part of the proceeds go toward JBLM Morale, Welfare, and Recreation programs, benefitting service members and their families.

Assets & Strengths

These are assets and strengths identified by tribal members, community, and staff during the Food Sovereignty Assessment:

FISHING

- Many tribal members fish commercially and for ceremonial and subsistence use.
- The Nisqually estuary – a critical salmon habitat – is preserved and slowly returning to an intact state.
- The Nisqually River is incredibly intact for a Puget Sound river, and is only becoming more so. Habitat acquisition and conservation within the Nisqually watershed is very strong, and there are many government and organizational partners who are helping with this work.
- Steelhead salmon populations may be on an upward trend.
- Tribe has a seafood company, She Nah Nam Seafood, that purchases, processes, and sells salmon from Nisqually fishers.
- She Nah Nam offers premium prices and ensures those prices stay consistent throughout the fishing season.
- Nisqually Markets sells smoked salmon from She Nah Nam Seafood.

SHELLFISH

- Numerous tribal members gather shellfish commercially and for ceremonial and subsistence use.
- Geoduck boat captains have a strong knowledge base, successful harvests, and good safety practices.
- When tribal enforcement officers confiscate geoduck from non-tribal gatherers, it gets sent to Nisqually Elders. Geoduck harvested for biomass survey also go to Elders' program.
- The Nisqually Shellfish Farm's Winter oyster stand is getting oysters out to tribal and community members and raising awareness about the Farm's work.

HUNTING

- Game meat is very lean and healthy, and there are many Nisqually tribal members who hunt for ceremonial and subsistence use.
- Nisqually hunting season is usually a month before and after the non-tribal state season, which means there is not as much competition with other hunters. Also, this creates a longer season with more hunting opportunities.

PLANTS AND GATHERING

- Many tribal members have knowledge of traditional plants as food and medicine.
- The Leschi Heritage Foundation of the Nisqually Indian Tribe hosts an annual Huckleberry Camp for tribal members to learn traditional foods skills and harvest huckleberries.
- Nisqually Indian Tribe has a cooperative agreement with Mount Rainier National Park for tribal members to gather traditional plants within the park.
- Nisqually Garden offers classes on identification, harvest, and use of traditional plants
- Nisqually Garden grows and distributes thousands of pounds of vegetables, fruits, and traditional foods each year to tribal and community members.
- Nisqually Natural Resources has a planting crew that has planted hundreds of acres of native plants in the Nisqually River watershed.

TRIBAL GOVERNMENT PROGRAMS & ENTERPRISE

- Nisqually Natural Resources Department completes many habitat conservation and restoration projects that maintain critical habitat for fish, game, and plants.
- There are approximately 30 dinners hosted by tribal programs each year, feeding the Nisqually people and building community.
- Because of feedback from Tribes across the United States, the USDA Food Distribution Program on Indian Reservations (FDPIR) has incorporated fresh fruits and vegetables into the commodities program (in the past, there was only canned and frozen produce).
- Nisqually Transit offers free transportation to grocery stores and food outlets anywhere in Yelm and Lacey.
- Cooks for Elders, Daycare, and Head Start programs partner with She Nah Nam Seafood and Nisqually Garden to offer fresh Nisqually-produced fish and produce in meals.
- Nisqually Health Department offers Brown Bag Lunch healthy cooking demonstrations, as well as regular community dinners encouraging healthy eating and lifestyle practices.
- The Nisqually Youth & Community Center added healthier options to their snack vending machines this year.
- The Health Fitness Nutrition program is implementing healthy food demonstrations at the Nisqually Youth & Community Center.
- Nisqually Garden offers fresh produce and learning opportunities to tribal and community members.
- Nisqually Headstart and Garden have strong collaboration to offer a Head Start garden, seasonal produce delivery to Head Start families, and teaching healthy eating curriculum to children.
- Nisqually Markets sells smoked salmon from She Nah Nam Seafood
- Red Wind Casino sources a great deal of fish and shellfish from She Nah Nam Seafood.

Challenges & Barriers

Here are challenges to food sovereignty shared by tribal members, community, and staff during the assessment:

FISHING

- There are many bureaucratic hoops to jump through on the federal level to secure the continued harvest of certain salmon species, especially Chinook salmon, which is protected by the Endangered Species Act.
- In spite of many successful restoration efforts, it is still very hard to recreate and recover natural habitat that has been destroyed by development.
- Most Nisqually River salmon runs are getting smaller.
- There are dams on the Nisqually River that disrupt salmon habitat and hold back sediment from the river downstream.
- Climate change will continue to impact salmon in each part of their lifecycle, from the Nisqually River, to the Puget Sound, the Pacific Ocean.
- The Fall Chum salmon run is heavily fished further north in the Puget Sound, which makes fewer salmon available for catch in the Nisqually River.
- Increasing sea lion populations in the Puget Sound may be having an outsized impact on the Chum run – up to a third of the chum run may be eaten by sea lions before entering the Nisqually River.
- GMO Salmon is the first genetically engineered animal to enter the world's food supply. It was approved by the FDA in 2015, but a ban is currently in place on its sale and import. However, a US-based company is currently raising GMO salmon and selling them as human food in Canada. GMO salmon have far-reaching implications for the future of wild stocks and food safety.
- The Nisqually Weir, a project to track and count salmon runs, did not work.
- Not all Tribal fishers have access to facilities, equipment, and supplies to smoke fish.

SHELLFISH

- Almost all the wild shellfish areas in the Nisqually Tribe's U&As are boat access only, which is a major barrier to harvesting for tribal members.
- Distributors working with the Nisqually Shellfish Farm would like to buy more product from the farm.
- There was a gap in planting manilla clams, so there are none ready for harvest this year.

- Many people don't know how to shuck or prepare oysters.
- Community awareness needs to be raised about what the shellfish farm is doing, and what products they are harvesting and selling.
- There are many limitations on shellfish seed: often there is not enough from seed suppliers, and often the suppliers don't have the desired species (for instance, there are no suppliers for native littleneck clam seed).
- Ocean Acidification endangers the normal lifecycle development of shellfish.
- Water Pollution in Puget Sound can make shellfish unsafe to eat.

HUNTING

- Elk herds are getting smaller in many places, so there are fewer elk to hunt.
- Changes in river courses have taken out a lot of elk habitat in the mountains. Habitat loss also occurs with human residential and commercial development.
- Private logging companies lock the gates in forest lands, so hunters cannot access those lands.
- Overhunting by non-tribal hunters.
- In years when it doesn't snow, elk stay up higher in the mountains. They are much harder to hunt there. If snowfall changes because of climate change, this could significantly affect hunting access.
- Legal issues may block gun use, which may prevent exercising treaty hunting rights.

PLANTS AND GATHERING

- Many places where tribal members have gathered traditional foods in the past have been impacted by development, contamination, and other habitat destruction.
- Commercial overharvest of mountain huckleberries often damages plants and reduces yields.
- There is often ambiguity about where tribal members can gather.
- There is a greater demand for produce that the Nisqually Garden can supply.

TRIBAL PROGRAMS & ENTERPRISE

- Communication and coordination between different tribal programs – or lack thereof – was a challenge expressed by most program leaders.
- Soda is readily available in all departments and tribal buildings.
- There are limited catering options for events. It is hard to source healthy foods from catering companies, and even harder to source traditional foods.
- There is no resource where tribal member food vendors (fishers, crabbers, geoduck harvesters, caterers, etc.) are listed. So when tribal programs plan events, the event planners don't know who to call to source these foods.
- Even when event planners do know who to contact to source traditional foods, the Tribe's accounting system often doesn't allow for a quick turnover or cash payments to tribal member fishers, shellfish gatherers, and food vendors.

- There is no list of tribal cooks that event planners can contact.
- It can be hard to provide a variety of food for tribal events.
- Sometimes food served at community meals doesn't meet the needs of tribal Elders.
- Meals at tribal events balance between needs to be efficient, fast-paced, and familiar, and sometimes nutrition is not a top consideration.
- It can be hard to plan for tribally-sponsored community dinners, since planners don't know if there will be 50 attendees or 300, or somewhere in between.
- Increasing lactose intolerance among tribal members can be a challenge for tribal cooks.
- Many food distributors require minimum quantities, which is a challenge for Headstart and Daycare kitchens who need smaller quantities.
- Food choices on the Nisqually Reservation are limited.
- Traditional Foods are not available through the Washington State WIC food package.
- Meals for childcare programs must be made from products with USDA Child Nutrition (CN) labels. Local grocery stores where cooks shop for food do not have many choices with CN labels.
- USDA regulations can be confusing & restrictive for meal programs, especially when it comes to using fish, shellfish, game, and garden produce from tribal members and tribal programs.
- It can be hard for program cooks to buy fish from tribal members, because the accounting system does not facilitate fast turnaround for buying products – if a fisher comes in with a product to sell, there is not a system in place for the cooks to purchase that salmon from them immediately.
- Many program leads stated that it was hard to know how to prioritize food services, because there was a lack of understanding of what was most important and useful to tribal members.
- It can be more expensive to eat healthy than it is to eat junk food.

Chay Squally harvesting camas

Recommendations & Future Directions

These are recommendations and ideas shared by tribal members, community, and staff on how to build a stronger Nisqually food system.

- Building a community smokehouse for tribal members to smoke fish and teach others.
- Creating healthy & traditional food policies for tribal events.
- More tribally-owned facilities to process and store community foods.
- More coordination of food purchasing and cooking across programs.
- Creating and maintaining a contact list for tribal member cooks, fishers, seafood harvesters, hunters, and gatherers, so tribal programs can source more traditional foods directly from tribal members.
- Building a temperature-controlled facility for tribal hunters to process their deer and elk. This would give all tribal hunters access to a clean, sanitary facility and the necessary tools and equipment. It could also serve as an educational facility to teach youth how to process game meat.
- Offering hunting classes and demonstrations for youth.
- Offering hunting safety courses for all tribal hunters.
- Nisqually Markets would like to start offering Tribal government programs the service of making direct food orders from the on-Reservation Nisqually Market store. They would also like to start offering food delivery to tribal Elders. They may do a community survey to get a better idea of what foods and services tribal members would like.
- Finding a successful way to offer local produce at the on-reservation Nisqually Markets location.
- Creating a position in the tribal government that coordinates all food-related efforts.
- More healthy snacks and fewer sugary drinks in tribal building vending machines.
- More healthy food choices at community events.
- More food education, meal planning support, and healthy cooking classes.
- Creating accounting systems to facilitate programs purchasing food products from tribal members.
- She Nah Nam Seafood is exploring the feasibility of a pilot central storage and processing facility for salmon and seafood, in collaboration with Muckleshoot, Puyallup, Squaxin Island, Quileute, Quinault, and Chehalis Tribes.
- She Nah Nam Seafood is exploring investment in a Mexican shrimp farm to diversify their product line and increase sales to casinos and restaurants.

- She Nah Nam may eventually become a primary food distribution company for the Nisqually Tribe and its enterprises, offering a wide range of food products and supplies.
- Making sure all new programs and changes are driven by tribal members and thoroughly vetted with tribal member input.
- Offering more education about chemicals in foods and how they affect health.
- Developing a weekly produce delivery program for tribal members, through Nisqually Community Garden.
- Integrating native food sovereignty into WA State's Since Time Immemorial curriculum.
- Creating more support for traditional plant gathering – education, structured trips, etc.
- More recipe sharing and distribution.
- Better systems to get food to Elders and others who are homebound.
- More long-term mentorship in hunting, fishing, shellfish harvesting, and traditional plant gathering.
- Paying harvesters.
- Creating a bartering fair.
- Hosting food-based contests, such as a fish smoking contest, fish head eating contest, cooking contest, etc.
- Find ways to facilitate tribal programs buying food from tribally-owned food producers for events, meals, etc.

Erika Warren teaching about Razor Clams

Conclusion

"Indian people evolved eating traditional foods like elk, salmon, clams and berries. These are the foods that are best for our bodies...Our treaties recognize that food is at the center of our cultures. Indian tribes are sovereign nations, and part of that sovereignty includes access to the traditional foods needed to keep ourselves and our communities healthy and strong." – Billy Frank Jr. 2012, Being Frank: Traditional Foods Are Treaty Foods

We have had the honor of learning from many people while conducting the Nisqually Food Sovereignty Assessment. While everyone had unique stories to share, there were common themes that appeared again and again in our conversations and surveys:

- **The Nisqually Indian Tribe has a rich food heritage and a wealth of food resources. Connecting to traditional foods means having a relationship with the seasons and with the environments of the Nisqually River, Mount Rainier, the Puget Sound, and the surrounding forests and prairies.**

- **Traditional foods are all about family. People learn how to harvest traditional foods - and the cultural protocols required - from their families. This requires a connection across generations: Elders, Adults, and Youth.**

- **Many tribal members feel that traditions around food in Nisqually are being lost. Convenience of other foods, the time and work it takes to harvest, loss of familiar harvesting places, and declining populations of fish, shellfish, game, and wild plants are all commonly cited.**

- **There is a resurgent interested in traditional foods, and tribal members are hopeful about the future and the Tribe's ability to support reconnection with traditional foods.**

There were also themes that emerged about how to take action to build greater food sovereignty in Nisqually. Some of the key takeaways from our assessment:

MORE PROCESSING FACILITIES AND EDUCATIONAL OPPORTUNITIES

Many tribal members spoke about the benefits of a tribally-owned smokehouse, game processing facility, and community kitchen for canning, drying, and preserving food. This could provide a way for tribal members who don't have these facilities to actively

engage in traditional food activities. These venues could also provide a location to host intergenerational workshops and classes for tribal members to learn how to smoke salmon, process deer and elk, and preserve fruits and vegetables.

FIND WAYS TO HELP TRIBAL PROGRAMS BUY FOOD FROM TRIBAL MEMBERS AND TRIBALLY-OWNED FOOD PRODUCERS

In 2016, there were 29 community dinners hosted by the Nisqually Tribe. And in just the first seven months of 2017, there have already been 23 community dinners. These meals are usually held at the Nisqually Youth & Community Center or the Billy Frank Jr. Community Services Center, and occasionally in other tribally-owned locations. They are a vital part of community-building and connection in Nisqually, strengthening tribal support networks and identity. They also connect tribal members with resources offered by the Tribe.

Almost all event planners and program managers talked about how it was hard to source Nisqually-produced foods. Most also did not know how to contact cooks in the community. Accounting processes, food safety regulations, and not knowing where to start were all common reasons. Maintaining a contact list for tribal member cooks, fishers, seafood harvesters, hunters, and gatherers would be a great step forward. Providing training and support to event planners and addressing accounting and food regulation issues on an administration-wide level would also help get Nisqually foods into Nisqually event meals.

LEARN FROM AND EXPAND EXISTING NISQUALLY ENTERPRISES

Red Wind Casino and Nisqually Markets are important food sources for most tribal members living on or near the reservation. These businesses are owned and controlled by the Tribe and are therefore in a prime position to lead the way on any innovative food projects the Tribe wants to take on. She Nah Nam Seafood is one example: this Nisqually-owned business sells to both Red Wind and Nisqually Markets, which serves the triple purpose of making income for the tribe and tribal member fishers, while making traditional foods more accessible to tribal members. This could be a model for future endeavors, such as selling Nisqually Garden produce and tribally-produced foods at the casino and convenience stores.

We hope this Food Sovereignty Assessment sparks new conversations and expands awareness about the many parts of the Tribe's food system. We hope that it helps programs in different parts of the Tribal government learn about each other and find new ways to work together. Most importantly, we hope it can be one tool for tribal members to use in the ongoing work of strengthening the food sovereignty of the Nisqually people for generations to come.

Our Methodology

The Nisqually Food Sovereignty Assessment (FSA) was conducted from September 2016-August 2017. The FSA was rooted in the principles of community-based participatory research and was informed by the First Nations Development Institute's FSA Tools and technical assistance. Research design and data collection was a collaborative effort with numerous Nisqually Tribal departments and programs. Many tribal members, community members, and staff participated in the FSA.

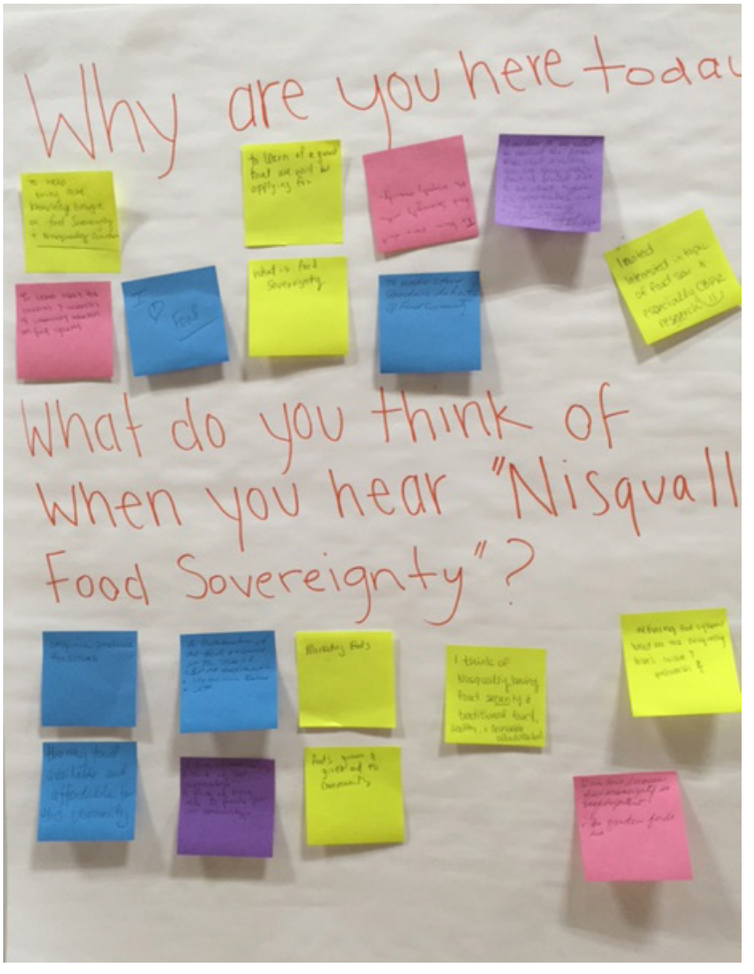
The FSA team decided to use a mixed-methods data collection approach involving key informant interviews, focus groups, a community food survey, and a two-credit class at Northwest Indian College's Nisqually Campus.

Herman McCloud
/ Tony Mercado, Susan Martin, Candice McCloud, Jamie Murphy

KICKOFF INTERVIEWS WITH TRIBAL LEADERS

In November 2016, we conducted interviews with leaders in the Tribe's government, administration, and community. We convened a group meeting that allowed us to gather information, in addition to sparking a rich conversation that generated more ideas and excitement about the Food Sovereignty Assessment. This meeting served as the kickoff for the assessment, and we provided traditional foods, including elk stew, smoked salmon, native berry and nut trail mix, blueberry bread, and wild chokecherry jelly.

We designed a dynamic meeting with interactive activities, including asking participants to answer the questions "Why are you here today?" and "What do you think of when you hear Nisqually Food Sovereignty?" on sticky notes, which they placed on poster paper, and we read aloud to start the meeting. This gave us insight into the ideas about food sovereignty held by the tribal leaders assembled. We also asked participants to pick a commonly eaten food and track the steps it takes to get to the table. This led into a discussion about what parts of the food supply chains are controlled by the Tribe, and what parts the Tribe could regain control of. Next, participants shared their perspectives, at length, about the many resources and barriers related to food sovereignty in Nisqually and generated ideas about how to strengthen these resources and overcome barriers. Finally, we shared an overview of the grant timeline and asked who wanted to commit to continuing their involvement with the Food Sovereignty Assessment. All participants committed to continuing to be involved.



Our FSA planning team met after the kickoff interviews and reviewed the information and insights generated. We agreed that our interviews provided strong directions to pursue during the Food Sovereignty Assessment.

Our Methodology

SURVEY DESIGN

The First Nations Development Institute's FSA Tools and other grantees' reports were reviewed in the initial design of the survey. The team adjusted questions for the Nisqually community and added questions specific to the Nisqually Tribe's programs and food sources. The draft survey was reviewed by the larger research team and then piloted with a select group of community members that included Elders and tribal members from various backgrounds. Based on the feedback, questions, and concerns from this pilot, a revised survey was completed and sent to the survey population.

SURVEY POPULATION

After long discussions with the community, it was decided that the priority population for the survey was enrolled Nisqually tribal members who live on or near the Nisqually Reservation. We also realized that tribal members who lived further away, as well as tribal employees and community members, were important for understanding the overall food system. Thus, to get the most comprehensive results, the survey was designed and distributed to adult enrolled Nisqually Tribal members as well as community members. Community members were loosely defined as individuals who lived on or near the reservation and were actively part of the Nisqually reservation community, such as Nisqually tribal descendants, spouses, relatives, friends, and employees.

Frankie McCloud & Elders first at community dinners

vey Design

The survey was physically mailed to all enrolled Nisqually Tribal members aged 18 or older with a pre-paid return envelope. In addition, this survey was uploaded to the online survey tool SurveyMonkey and accessible by weblink. This weblink was used to reach the community members and employees. It was emailed to all Nisqually employees and posted to a restricted Facebook page for Nisqually community members. To ensure access, a paper version of the survey was made available at the Tribe's front desk and several tribal events.

Nisqually Tribal members were offered herbal body care kits as incentives for completing the surveys, and everyone who completed a survey was entered in a raffle to win a food-related prize (food dehydrator, vacuum sealer, crock pot, etc). Herbal body care kits consisted of a skin salve, healing oil, and lip balm, all handmade by Northwest Indian College students and Nisqually Community Garden staff.

SURVEY ANALYSIS

The surveys were collected into a single online SurveyMonkey database for comparative analysis. This included inputting all surveys received by mail or paper into this database. There were 103 paper or mailed responses and 53 online responses submitted between April 2017 and July 2017. Initial comparative data analysis started in July 2017 and looked for any statistically significant differences across various subgroups, such as: Age, Gender, Education, Income, and Tribal Enrollment. Virtually all comparisons showed no significant difference between subgroups or consisted of subgroups too small to compare without combining and losing some statistical validity.

The main analysis was for those who reported being enrolled in the Nisqually Indian Tribe and living on or near the reservation. A second, smaller analysis was done for those who lived on or near the reservation and were employed by the Nisqually Tribe. Additional analysis can be conducted in the future on the surveys from individuals who did not meet these two priority categories. The reported results highlight the count and responses to the questions.

Grace Ann Byrd harvesting pumpkins with Head Start youth

Our Methodology

DESIGNING AND HOSTING THE FOCUS GROUPS

Our focus groups were focused on Tribal departments, programs, and enterprises that are involved directly in the harvest, production, and distribution of food and food-related services. While our original objective was to complete only three focus groups, it became clear that there were more groups needed to get a more complete picture of the food resources supplied by the Tribe's government and businesses. We completed nine focus groups in total.

The FSA team designed 17 questions to provide internal validity, and discussion prompts were outlined to support consistency across the discussions. The focus groups were designed for 1 hour, but several groups wanted to share more and spoke for 1 ½ to 2 hours. Traditional foods, including smoked salmon, native nut and berry trail mix, and other snacks, were provided at each focus group.

Camas is an important traditional food of the Nisqually People

The nine focus groups were: Health Services, Community Services, Food Producers, Program Cooks, Elders Center, Fitness Program, Cultural Programs, Natural Resources, and Transportation.

FOCUS GROUP ANALYSIS

The focus groups helped the Nisqually FSA team identify the services, opportunities, and concerns of the Tribe's program staff regarding food access, purchasing, health, culture, and traditional foods. The questions sparked many illuminating, wide-ranging conversations and gave us an in-depth view into the food-related work of each program and department. Our initial plan was to transcribe the focus groups in order to conduct qualitative analysis on the responses. This analysis plan was revised after the addition of 6 focus groups and to protect some of the sensitive information shared.

As we reviewed our focus group recordings, transcripts, and notes, we also realized that the creation of a food directory and in-depth profiles of the Tribe's food providers was the best way to organize and share what we learned in the focus groups. This is how we developed the Nisqually Food

ANALYSIS

Directory and Nisqually Food Provider Profiles sections of the FSA report. We also reached out to staff who did not participate in the focus groups for these sections, to fill in information gaps. We vetted each section with appropriate program staff to ensure the accuracy of the information. This was an intensive process, but it was well worth it to create the first-ever compilation of the Nisqually Tribe's food resources in one report.

These focus groups also gave us insights into what food resources currently exist in the Nisqually community, what food resources used to exist but are not being accessed now, and ideas for improving the Nisqually food system. This information has been compiled into the Assets, Challenges, and Recommendations section of the report.

PARTNERSHIP WITH NORTHWEST INDIAN COLLEGE NISQUALLY CAMPUS

During Spring quarter 2017, the FSA team partnered with Northwest Indian College's Nisqually site to offer a two-credit class based on the objectives of the FSA. NWIC students explored key concepts of native food sovereignty, entered data from completed surveys, made the herbal body care products that were used as survey incentives, attended a wild spring greens workshop at Nisqually Community Garden, and made a video on food sovereignty-related themes.

This collaboration enabled student involvement in the grant work and reinforced the community-based participatory research approach. Since students attending NWIC-Nisqually live locally and are a part of the Nisqually tribal community, they were able to take the FSA work into the community and also take ownership of the process by analyzing data and sharing their work in a personal way with friends, family, and community members. Students also developed greater self-awareness and reflection about their own relationship to the Nisqually Food System. Finally, students had the importance of their contributions reinforced by receiving college credit for their work.

Limitations & Challenges

The grant received by First Nations Development Institute (FNDI) I was to conduct a Food Sovereignty Assessment to get a baseline idea of the Nisqually Indian Tribe's food system. We wanted to know where people were getting their food, what types of food people were getting, how much of it, and why. We also wanted to take stock of the resources and challenges that exist in the food system and generate ideas about improving the Tribe's food sovereignty. The Nisqually FSA team was challenged to draft a new, Nisqually-specific FSA. After our review of the FNDI's FSA toolkit and other Tribes' FSAs, we realized how complex our local food system really was and how difficult it would be to capture these responses with the previously drafted FSA tools. While many surveys at the Tribe have gathered information over the years, formal research, published research, and cross sectional baseline data was not readily available or, upon review, applicable.

This project was restricted by the budget and timeline. These two items were, by far, the two biggest challenges and limitations of this research. For example, there was not enough time and funds to support door-to-door data collection or a more qualitative, open-ended survey instrument. Ideally we would have kept open the survey collection much longer or until a minimum number of surveys were received, but we were limited by time. Our sample size was 156 and could have been better. In addition, many respondents skipped questions, making comparisons across questions difficult. We also received very few responses from tribal members between the ages of 18-31.

In the future, open community focus groups, town halls, or forums like "community cafés" should be considered. Even better, we would like to do door-to-door outreach and surveying conducted by tribal members. The Nisqually FSA team organized the focus groups based on department or job type, and while we conducted nine of them, many individuals invited could not participate due to timing conflicts. This limited our focus group results, and we also acknowledge that we likely left perspectives out, since we may not know all of the different departments involved in or impacting Nisqually food system.

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