First Nations Development Institute

MAY 2019

FOOD SOVEREIGNTY: CALIFORNIA

Policy Considerations for California Native Communities in 2019

FIRST NATIONS DEVELOPMENT INSTITUTE

Prepared by:

Hillary Renick, J.D., LL.M.

Aryana Henthorne, MSW candidate

FOOD SOVEREIGNTY: CALIFORNIA

Policy Considerations for California Native Communities in 2019

First Nations Development Institute

MAY 2019

SUGGESTED CITATION

Renick, H., Henthorne, A. (2019). *Food Sovereignty: California Policy Considerations for California Native Communities in 2019.* First Nations Development Institute.

Cover photo provided by H. Renick (*Sherwood Valley Pomo/Paiute*).


CALIFORNIA TRIBAL LANDS
Tribal Lands
County Boundary
Sources: U.S. Census Bureau (2011), ESRI (2006), TANA (2006).
AIR1100040_3 16 May 2011
0 25 50 100 Miles
N
S
E
W
CALIFORNIA
Smith River
Elk Valley
Big Lagoon
Trinidad
Yurok
Hoopa
Karuk
Quartz Valley
Karuk
XL Ranch
Fort Bidwell
Cedarville
Alturas
Lookout
Likely
Big Bend
Blue Lake
Table Bluff
Rohnerville
Roaring Creek
Montgomery Creek
Pit River
Redding Rancheria
Susanville
Round Valley
Greenville
Susanville
Laytonville
Sherwood Valley
Paskenta
Chico Rancheria
Grindstone
Berry Creek
Coyote Valley
Redwood Valley
Upper Lake
Enterprise
Mooretown
Pinoleville
Colusa
Robinson
Manchester
Cortina
Guidiville
Sulphur Bank
Hopland
Rumsey
Stewarts Point
Auburn Rancheria
Wade
Parcels
Washoe (Woodfords Community)
Cloverdale
Big Valley
Middletown
Shingle Springs
Ione Band
Jackson
Dry Creek
Graton
Sheep Ranch
Me-Wuk
Bridgeport
Lytton
Tuolumne
Chicken Ranch
Benton Paiute
Picayune
North Fork
Bishop
Big Sandy
Big Pine
Table Mountain
Cold Springs
Fort Independence
Lone Pine
Timbisha Homelands
Santa Rosa
Tule River
Santa Ynez
Fort Mojave
Chemehuevi
San Manuel
Morongo
Twenty-Nine Palms
Soboba
Agua Caliente
Santa Rosa
Cabazon
Ramona
Cahuilla
Augustine
Cabazon
Colorado River
Pechanga
Pala
Torres-Martinez
Pauma-Yuima
Los Coyotes
San Pasqual
Santa Ysabel
Mesa Grande
Inaja-Cosmit
Barona
Capitan Grande
Viejas
Cuyapaipe
Sycuan
Manzanita
Jamul Indian Village
La Posta
Campo
Quechan
SISKIYOU COUNTY
MODOC COUNTY
HUMBOLDT COUNTY
TRINITY COUNTY
SHASTA COUNTY
LASSEN COUNTY
TEHAMA COUNTY
PLUMAS COUNTY
MENDOCINO COUNTY
GLENN COUNTY
BUTTE COUNTY
SIERRA COUNTY
COLUSA
NEVADA
YUBA
LAKE
PLACER
SUTTER
YOLO
EL DORADO
SONOMA
SACRAMENTO
ALPINE COUNTY
NAPA
AMADOR
SOLANO COUNTY
CALAVERAS COUNTY
TUOLUMNE COUNTY
MARIN COUNTY
CONTRA COSTA
SAN JOAQUIN COUNTY
SAN FRANCISCO COUNTY
ALAMEDA COUNTY
STANISLAUS COUNTY
MARIPOSA COUNTY
MONO COUNTY
SAN MATEO COUNTY
SANTA CLARA COUNTY
SANTA CRUZ COUNTY
MERCED COUNTY
MADERA COUNTY
FRESNO COUNTY
SAN BENITO COUNTY
INYO COUNTY
TULARE COUNTY
MONTEREY COUNTY
KINGS COUNTY
SAN LUIS OBISPO COUNTY
KERN COUNTY
SANTA BARBARA COUNTY
VENTURA COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
ORANGE COUNTY
RIVERSIDE COUNTY
SAN DIEGO COUNTY
IMPERIAL COUNTY

EPA, 2016.

TABLE OF CONTENTS

TRADITIONAL FOODS IN CALIFORNIA

California is the most populated state in the union as well as one of the largest ecologically and culturally diverse regions in North America.

California tribes are unique in geography, language, land, air, water and cultural resource issues. The land bases of California tribes range from urban centers to some of the most isolated regions in the country.

This report will examine current threats to traditional foods and tribal food insecurity due to the rapid culture change of California tribal communities in the past century.

Despite the widely-held belief that pre-Columbian tribes were simply hunter-gatherers, they were in fact advanced agriculturalists. Meso-Americans started domesticating corn over 9,000 years ago. [1] Corn is one of the seven plant foods that account for more than half of all human nutrition worldwide. The others are wheat, rice, potatoes, barley, sweet potatoes and cassava. Four of the seven (corn, potatoes, sweet potatoes, cassava) were first domesticated by Indian people. Ironically, East Coast Indians taught colonists how to grow corn and were later characterized as hunter-gatherers. [2]

Food security is at the heart of American Indian health issues that affect the lifespan and life quality for children, adults, and elders. American Indian diets have only recently changed within one to two generations and therefore make this population more susceptible to obesity, heart disease, hypertension and adult-onset diabetes. [3]

Naturally occurring ecological systems are the sources for subsistence food and traditional economy for all California tribal nations. Ensuring ecological health of natural resources will also ensure functional food systems that are fundamental to successful continuance of cultural subsistence and religion practices. This report explores some of the natural resources that continue to be utilized for subsistence food as well as the policies at the state and federal level that affect how California tribal communities can access their Aboriginal resources.

Despite the widely-held belief that pre-Columbian tribes were simply hunter-gatherers, they were in fact advanced agriculturalists.

[1] The focuses of this report are the tribes and villages of specifically California, but corn was first domesticated and cultivated in Mexico. However, it spread throughout much of the United States and had reached as far as the Northeast by 1200 A.D. See Sean Carroll *Tracking the Ancestry of Corn Back 9,000 Years*, New York Times.

[2] See Keith Sealing, *Indigenous Peoples, Indigenous Farmers: NAFTA's Threat to Mexican Teosinte Farmers and What Can be Done About It?*, 18 American U. Int'l. L. Rev. 101 (2003).

[3] This report does not explore all of the health outcomes of poor nutrition that affect the lifespan of this population, but lists some of the most common and undesirable health outcomes here.

LEGISLATIVE MILESTONES

1850

STATEHOOD & INDIANS

California admitted into the Union. Act for the Government and Protection of Indians "facilitated removing California Indians from their traditional lands."

Chapter 133, Cal. Stats., April 22, 1850.

1851

LANDRUSH

Between 1851-52, the United States Army forced California's tribes to sign 18 treaties that were never ratified.

1853

CONGRESSION ACT RESERVATIONS

U.S. Congress approves five Reservations not to exceed 25,000 acres: Mendocino, Smith River, Klamath, Sebastian and Nome Lackee. Temporary reserves later established: Hoopa, Round Valley, and Indian farms throughout the state.

1871

NO MORE TREATIES

U.S. House ceases new claims of recognition of individual tribes as independent nations through treaties.

1928

MERIAM REPORT

Authorized by Secretary of Interior and funded by Rockefeller Foundation to critically analyze Indian policy in the U.S.

1934

INDIAN REORGANIZATION ACT

Legislation aimed at allowing tribes to control reservation resources by providing boilerplate constitution and bylaws for tribes.

1975

SELF-DETERMINATION

Indian Self-Determination and Education Assistance Act of 1975 (Public Law 93-638).

Now

CURRENT

California tribes are acquiring ancestral territories and Aboriginal natural resources as well as as protecting land, air, water and cultural resources in perpetuity.

Most California Indian tribes are currently located on land-parcel islands that cut off tribal people from the ecosystems and Aboriginal resources that are important to their cultures and subsistence.

Connection and utilization of important ecological systems are important to maintaining the ecological stewardship of the land. The terrestrial land and soil are important resources that produce much of the food that sustain foodstuff foragers, gatherers and agricultural tribal communities. The trade of products of the land is also necessary to continuing inter-tribal trade routes.

CULTURAL LAND USES

Foraging and gathering food, maintaining game grazeland, agriculture, gathering craft material, landscaping for permanent settlement, as well as maintaining religious areas and cemeteries are some examples of how California Indian people utilize the land.

In every California biome, these cultural practices of land use, stewardship and land management stimulate and support the existing ecological systems. The practices exist in a range of biomes including temperate coniferous forests, chaparral, temperate grasslands, deciduous woodlands, wetlands, marine areas and the semiarid desert land.

FOOD-LAND POLICY ISSUES

Access

Access is one of the most prevalent obstacles to Aboriginal food sovereignty. Due to the private ownership of land, some natural resources are inaccessible to tribal people. There are many instances in which private landowners refuse access to tribal gathering and fail to honor prior easements and informal usufruct agreements. [4]

Animal Regulation

Regulation of game and fowl that sustain subsistence tribal communities is also a detrimental threat to tribal food sovereignty as well as the continuation of culture.

New Agriculture

Change of land use to agriculture entails management practices that heavily disturb soil and change the land. Many of the desirable areas to convert to agricultural use are the same places that tribal people use for food foraging and material gathering. Recent growth in size and quantity of legal and illegal cannabis plantations is an example of an issue to watch.

Climate Change and Soil Health

Soil is a carbon dioxide "sink." Certain soil-nutrient cycles and soil chemistry could potentially be protective buffers to food supply if protected, or potentially make food harvest impossible. Soil health is heavily dependent on anthropogenic practices.

[4] Usufrct: A Civil Law term referring to the right of one individual to use and enjoy the property of another, provided its substance is neither impaired nor altered.

Toiyabe Community Wellness Program, 2016.

Western practices of corporate agriculture, burning of combustion fuels, new land development, oil and gas extraction, and the maturation of anthropogenic-driven climate change have all changed the chemistry of the air within the last century. Air pollution negatively affects both plants and animals, which cripples agricultural productivity and food security.

CULTURAL INFLUENCES ON AIR QUALITY

In some California tribes, food production required the management of land through prescribed burning while also maintaining knowledge of fire regimes, bio-physical fire effects, and general agronomy. This was one of the few American Indian practices that might have had a slight negative impact on local air quality. Only recently has Western ecology determined that prescribed burning was necessary for healthy biodiversity and ecological succession.

FOOD-AIR POLICY ISSUES

Burning of Combustion Fuels

Many California tribal communities are located in remote regions that are sustained on the leading causes of air pollution: motor vehicle-use for primary transportation, corporate industrial facilities like mines, and the use of wood for fuel. All of these activities create particulates that inhibit functions of animals, plants and humans.

Imported Foods

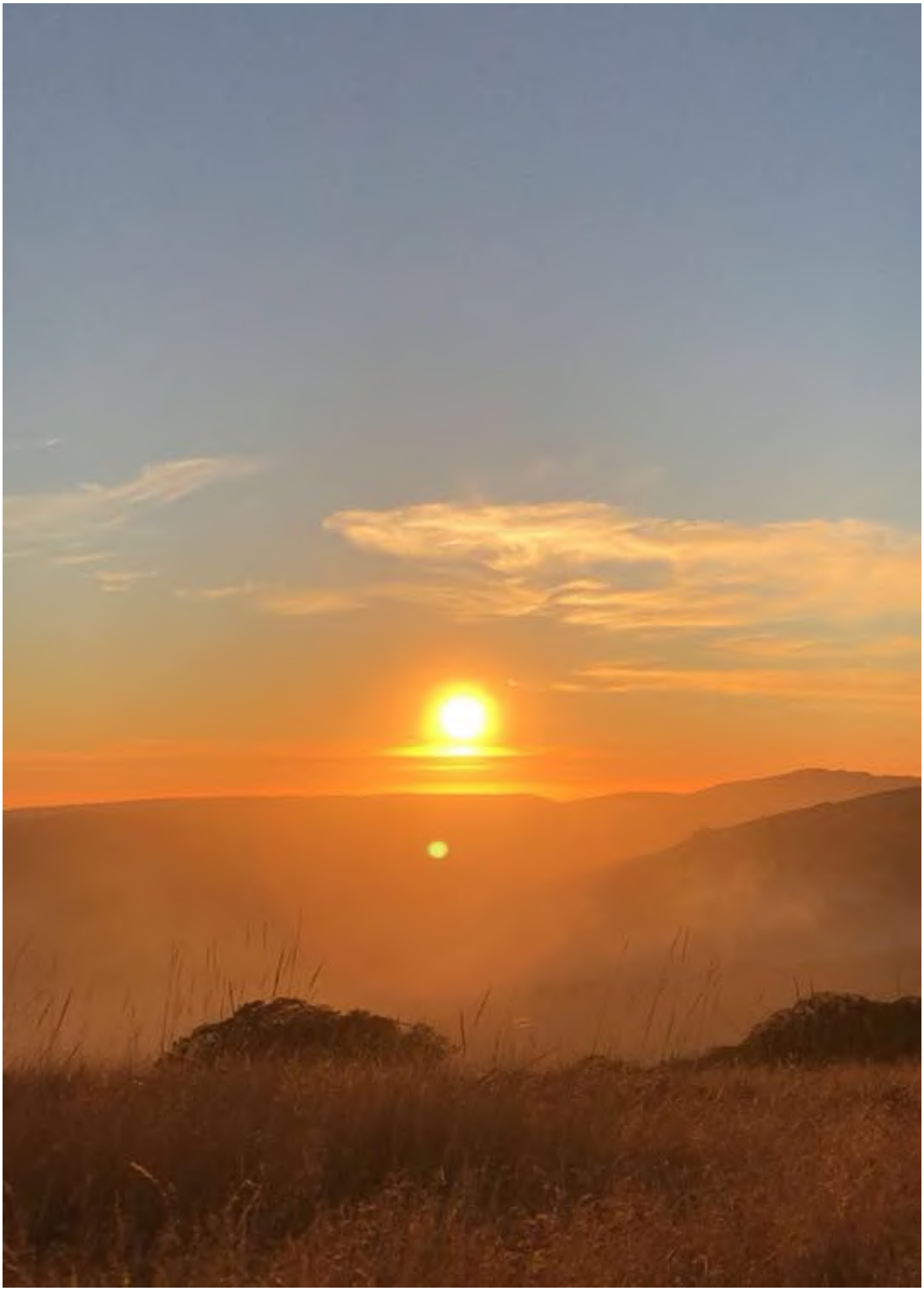
In the chain of modern agricultural food supply, there are lots of opportunities for primary and secondary air pollutants to be released from activities such as agricultural crop and livestock production, heavy equipment use, and transportation. Corporate agriculture often does not use sound stewardship practices to prevent air pollution or other environmental degradation. [5]

Climate Change and Air

Anthropogenic-driven climate change has increased the frequency and intensity of California's naturally occurring wild-land fires. These wild-land fires are directly and indirectly destructive to the natural resources California tribal people utilize for subsistence. As fire events increase, more particulates in the air create poor air-quality conditions.

Marva Jones (*Tolowa Deeni/Yurok*).

[5] See Feifei Sun et al. *Journal of Integrative Agriculture* 2017, 16(12): 2945–2962.



Marva Jones (*Tolowa Deeni/Yurok*).

TERRESTRIAL WATER HYDROLOGY

Water is one of the most important resources for all biologic life. Surface freshwater as well as the ground hydrologic systems that run throughout California are some of the most closely monitored natural resources on the Pacific Coast. This includes lakes, rivers, streams and aquifers.

CULTURAL TERRESTRIAL WATER USES

All communities of people exist near a water source. Water determines the biome of a region that includes the available flora, fauna, and therefore, dictates the cultural practices of people.

Fishing

The presence of wild fish in a freshwater body is reliant on healthy water chemistry and protection from anthropogenic activities. Subsistence fishing includes stewardship practices of maintaining healthy population ecology, habitat and water quality. This practice continues to sustain many tribal communities.

Cultural Agriculture

Some California tribal communities utilize terrestrial water sources for crop production. Conservation practices that maintain water quality and water chemistry are integrated with cultural practices.

Gathering

There are many types of wild flora that sustain California tribal people. Culturally important annual, perennial and biennials plants such as berries, oak trees and wild onions only exist with healthy hydrologic systems. These plants continue to be used for subsistence purposes.

Religion

Naturally occurring roots and herbs are gathered and used for a variety of religious events and consumption. Some of these plants only exist as keystone species in healthy aquatic systems and therefore require anthropogenic stewardship.

TERRESTRIAL WATER-FOOD POLICY ISSUES

Commercial Diversion

Entire hydrologic systems are being physically disturbed, altered and destroyed with the diversion of water to more arid regions. Commercial diversion practices create non-functional hydrologic systems that express evidence that they have surpassed homeostatic thresholds of recharge capacity (i.e. dry wells, land subsidence, saltwater intrusion). [6]

Commercial Agriculture

Agriculture is often cited as a water pollutant and danger to aquatic systems by overloading them both with nutrients and sediment. This has been shown to result in loss of aquatic life and has been the reason for some ecological collapses of water systems in California. [7]

[6] See Groundwater Depletion, USGS.
[7] See Agriculture & Water Quality in California, USDA.

Climate Change and Terrestrial Water Hydrology

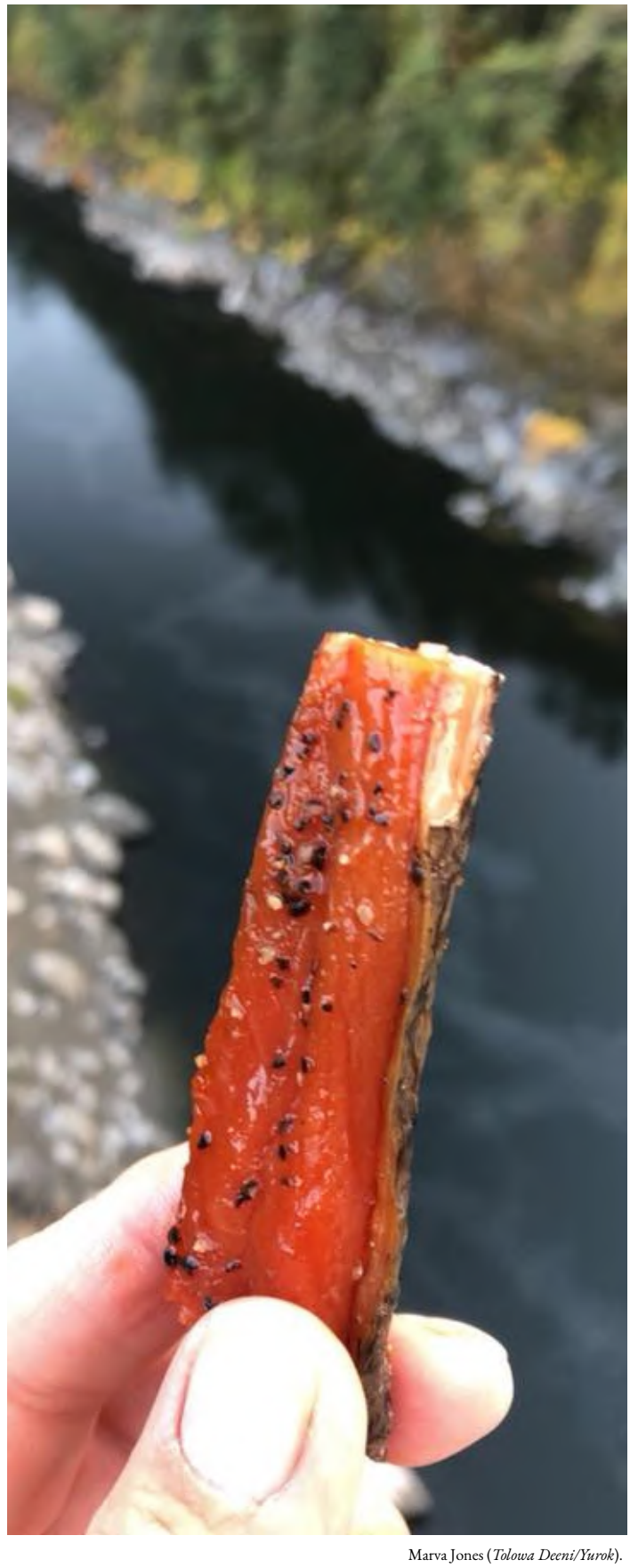
Terrestrial water systems are dependent on precipitation events. As anthropogenic-driven climate change raises temperatures, areas that experience storms will experience increases in precipitation and arid areas will experience less precipitation. This creates situations where groundwater recharging does not occur completely as well as places that become flooded due to oversaturation of the water table. [8]

Recreational Use of Water

The practice of using the terrestrial California water bodies for recreation does not recognize that there are cultural practices of subsistence that rely on water quality and water chemistry to retain certain aquatic conditions. There are limited protections on culturally important plants and animals despite tribal use for subsistence consumption. California policy on recreation is problematic because:

No policy differentiation between subsistence and recreation uses and allowances.

Limits opportunities to engage public dialogue on cross-cultural ecology.



Marva Jones (*Tolowa Deeni/Yurok*).

[8] See Precipitation Measurement Missions, NASA.

Sammy Gensaw (*Yurok*).

COASTAL & MARINE SYSTEMS

The coastal and marine habitats of California are unique and carry many microbiomes and organisms that are only found in this region of the world.

CULTURAL COASTAL & MARINE USES

The coastal and marine aquatic biomes continue to be utilized by California tribal people for a variety of purposes.

Fishing

Fishing practices for California tribal people continue to be a subsistence food source. The subsistence fishing in this biome integrates stewardship practices of maintaining population ecology.

Harvesting

Harvesting in the coastal aquatic biomes largely occurs in inter-tidal zones and near shore waters. These subsistence harvesting practices include maintaining healthy population ecology and ensuring that diversity of tidal microbiomes is preserved.

Gathering

Endemic herbs and fruits from the coastal biome continue to be gathered and used for consumption by California tribal people.

COASTAL & MARINE POLICY ISSUES

Access

Much of the coastal land is privately owned and restricts access for California tribal people despite the reliance on subsistence fishing, harvesting and gathering. Access is further restricted by threat of persecution.

Commercial Poaching

Many foods that occur naturally on the California coast are being used in exploratory dishes in popular restaurants in the urban areas of California. Consumer demand drives surges of commercial and recreational poachers to clear-catch and overfish the same areas that California tribal people use for subsistence. Poachers do not practice ecological stewardship in their harvesting and often exterminate entire populations of organisms in the coastal and near-shore biomes.

Legislative Language

Current language in California state policy does not differentiate between recreational uses and subsistence uses of coastal and marine areas. Despite subsistence uses that are based on interests of protecting and preserving biodiversity and ecological relationships, the language of legislation determines all human interaction with the environment to be detrimental.

Plastic Pollution

The path of plastic pollution of marine systems often starts at the coastal beach level with recreational activities and improper disposal of waste. Waste on the beach washes into the marine systems and harms the wildlife that California tribal people consume. Nearly every organism in the coastal and marine systems consume plastic. [9]

Methylmercury & PCBs

California has documented higher than average rates of methylmercury and PCBs in aquatic species that California tribal people use for subsistence. Methylmercury is a neurotoxin that is destructive to the nervous system and PCBs are known carcinogens. [10]

Energy

Offshore renewable energy, siting and leasing entail the implementation and operation of infrastructure that dismantle present ecological systems

Climate Change in Coastal and Marine Systems

The ocean has many micro processes that drive global weather. For example, temperature of water drives wind patterns. [11] The ocean is a large carbon "sink," meaning it has the chemical capacity to absorb some of the latent carbon dioxide and residual heat in the air that humans produce that, in turn, warms the ocean. This changes the chemistry of the ocean. [12]

Some of the effects that anthropogenic-driven climate change is having on this resource include:

More extreme weather patterns (wetter areas get wetter, drier areas get drier).

Chemical acidification of ocean pH as water absorbs more CO2. [13]

Loss of tolerable habitat for marine organisms.

Extinction of organisms that can't tolerate acidic conditions.

[9] See Parker, S. (2015). *Nearly Every Seabird on Earth Is Eating Plastic.* National Geographic, and Barclay, E. (2013). How Plastic In The Ocean Is Contaminating Your Seafood. NPR.

[10] See Moran, T. (2012). *Survey Reveals High Methylmercury in Coastal Sport Fish.* California Water Boards.

[11] See Fowler, R. (2016). *How Does the Ocean Drive Weather and Climate Extremes?* Columbia University.

[12] See Riebeek, H. *The Ocean's Carbon Balance.* NASA.

[13] See *What is Ocean Acidification,* NOAA.

Taylor Rees, Gather Film Project.

CONCLUSION

The California tribal presence has been absent at the policy advocacy level despite it being in tribal interests to be at the table to debate and ensure the ability to practice Aboriginal subsistence for generations to come.

The time to act is now. Current food and natural resource legislation in California state threatens to create more barriers to subsistence communities. However, California tribal nations are a formidable force with generations of resilience and matured ecologically-sustainable food practices. The voice of California Indian people is valuable to both the legislative and scientific narrative in modern food policy. By participating in the policy design of future food law, California tribal people can help their own communities achieve the definition of food sovereignty: the ability to feed themselves within their own food systems.

Marva Jones (*Tolowa Deeni/Yurok*).

First Nations Development Institute

CALIFORNIA OFFICE

104 North School Street Suite 323
Lodi, CA 95240

NATIONAL OFFICE

First Nations Development Institute
2432 Main Street, 2nd Floor
Longmont, CO 80501
Tel: 303.774.7836
www.firstnations.org
info@firstnations.org