



SEEDS OF SOVEREIGNTY –PLANNING FOR FOOD AND ENERGY SECURITY AND CULTURAL SURVIVAL IN A CHANGING LANDSCAPE



Executive Summary

The Nez Perce Tribe Resilience Program is proposing a project that will assist in food and energy sovereignty planning for the Nez Perce Tribe and Lapwai Valley. The proposed project is the result of three years of participation in the Tribe’s newly formed food coalition, and volunteering with Friends of the Community Garden. This project builds upon other efforts, and capitalizes on existing capacity. A diverse group of advocates for the community garden and for gathering and traditional foods offered support and suggestions for this project. We are proposing to prepare a food map, and a conceptual food trail design that weaves gardens, native plant areas, future solar projects, and community resources (library, schools, childcare and senior centers, cultural resources programs) into a cohesive whole. In addition, it will provide staff time to create a funding plan and grant applications for implementation and for a full-time community garden manager and for solar projects. Nez Perce ancestors planted food trails on their ancestral journeys to fishing, hunting, and gathering areas to support seasonal movements. The food trail is meant to increase food security, knowledge about community food and wild food resources, and to involve youth in learning cultural knowledge and planning for novel future conditions. Also, the tribe is determined to find a way to fund solar projects and battery storage for community centers and the health clinic that can be utilized for emergency management. This project addresses current, pressing health, and social needs while planning for a sustainable future.

Background and Proposed Statement of Work

Geographic Location

This project is centered in Lapwai Valley, but includes some remote gathering sites that we are not able to share due to their sensitivity. Lapwai is the government seat of the tribe and has approximately 1200 residents, of which 900 are tribal members. The Nimiipuu Health Clinic is located in Lapwai, and an indeterminate number of patients that utilize the clinic and live in other locations will also benefit from this project. Please see Map 1 on facing page.

Background

Traditional foods and culture that have kept the Nez Perce strong for thousands of years are now faced with alarming changes in the availability, quality, and quantity of traditional foods and medicines. The resilience team at the tribe searched the literature and interviewed elders and community members, and completed a community survey to understand the impacts of climate change on traditional foods. It was found that western scientists have not evaluated the direct impacts of extreme weather and changing weather patterns on most of the traditional plants of greatest importance to tribal members. The Nez Perce Tribe Resilience Program has drafted a vulnerability assessment for the Tribe that is now undergoing revision and peer review. Utilizing

both traditional knowledge and western science, critical issues identified by this assessment include: changes to the availability and quality of traditional foods, dramatically shifting climatic and crop suitability zones, shifts in precipitation and temperature affecting habitat for wild foods, drier and hotter summers, and less moisture in wetlands, and struggles with intergenerational transmission of knowledge about cultural foods. In addition, current struggles with food insecurity, food stress, hunger and poverty both on and off the reservation are exacerbating social issues, public health, and resilience.

Tribal peoples throughout the Americas learned how to utilize native plants for foods, medicines, fiber, tools, and construction materials, and some species are important for ceremonial or spiritual practices. Cultural survival is intimately intertwined with place based traditional knowledge about native plants, and how to find, harvest, cultivate, protect, process, prepare, consume, and preserve them. In the Nez Perce Tribe, gathered foods are women's foods, and traditional gatherers, who are mostly elders, maintain the knowledge about where, how, and when to gather. Young gatherers have expressed that it is up to the gatherers to sort out what to do when conditions change, and traditional leaders want to be sure that the food relatives on the table are increasing, and are not limited to a particular suite of species because some of their food relatives are already missing from ceremony. In addition, elders remember that their grandmothers had huge gardens and that locals produced most of the food that was consumed on the reservation when they were young. They also remember picking fruit off of trees throughout the small towns on the reservation when they were hungry. Some tribal members continue to garden, and there are remnant orchards and fruit trees scattered throughout the reservation. However, tribal members have expressed great concern about hunger amongst the youth and a lack of knowledge about local foods.

Statistics regarding hunger and food security from the five counties that overlap the reservation, and the neighboring county of Asotin in Washington indicate that 18.2% of children and 14.1% of adults are food insecure in the communities within and surrounding the reservation. The total population of these six counties is only 90,301, of which 17,880 people are considered to be food insecure (<https://map.feedingamerica.org/county/2017/child/idaho>).

However, the tribe is located in a rural area with an agricultural economy, an area where prairies have been converted into cereal and legume crops, and the most important wheat growing area of the United States. Even though most of the checker-boarded reservation has been pressed into service to "feed the world", inadequate produce and food is grown for local consumption, most of the local farms are commodity driven industrial operations, and the healthful food locally available is largely imported or wild. In addition, the Nez Perce Reservation is located in what is considered the Banana Belt of Idaho, and it is actually possible to produce all of the food that is needed for local consumption here. However, the U.S. Department of Agriculture (USDA) has cited four Census tracts on the reservation as food deserts and five more as having low access to fresh foods. The Nez Perce has the highest rate of diabetes of any tribe in the Northwest - at 10.6 percent of the population, according to Nimiipuu Health. In addition, important traditional gathering and hunting areas on the reservation have largely been converted to industrial agriculture requiring gatherers and hunters to have motorized transportation and funds for fuel to

hunt and gather. In addition, knowledge about gathering is transmitted within families, and not all families have remaining elders from which to learn. Also, single parents, and other sensitive groups, tend to not have the resources or time to go out and gather.

We believe it is necessary to focus on the food system now during a period of relative peace and stability given that future projections for the primary food producing regions in the United States indicate increasingly poor or volatile conditions for production of agricultural products including rising sea levels, droughts, floods, extreme heat, and wildfires, a need for capacity around this issue, and the overwhelming concern of the Nez Perce community regarding changes to roots, berries, medicines, and native plant habitat.

Planning Strategy, Timeline, Objectives, Milestone and Deliverables:

Please see the following table that details objectives, milestones, deliverables, outcomes, the project timeline, and measurements of success. This project is designed to support the adaptation plan which includes a section on increasing food and energy sovereignty.

In order to develop this project proposal, we spoke with traditional gatherers, fishers, leadership, economic development, and the local agricultural extension agent about projects that they would like to see to help address this issue that are climate centric to try to determine how to move forward, but for which they do not currently have the capacity or funding to complete. They asked us to write this grant for a few very specific items. First, the creation of a community food map that would allow for clear information about what can and cannot be shared within and beyond the community while still protecting sacred gathering sites. This would allow for utilization of local trees and produce that are available for community members. Second, to create a Food Trail plan. The plan would include creating a food forest and trail through the City of Lapwai where the government seat is which would increase food security and availability during climatic uncertainty. There are several locations in the City of Lapwai with access to water that are ideal for food forests that include both native and cultivated species which would work in concert with the riparian ecosystems to benefit water quality and wildlife, and are accessible to community members. Third, includes funding for a full-time community garden coordinator or educator that can devote their entire job to re-training this community how to garden, training youth how to garden, putting community gardens at the Boys and Girls Clubs and the HeadStart, and investigating the potential for school gardens which would increase the community's overall resilience.

Importantly, fishing and the impacts of rising temperatures and changing hydrology on salmonids is the number one concern of the tribe, but, due to the commercial value of salmon, their federal listing status, and mitigation funding for dams, a great deal of time, money, and attention is already being focused on fish. In addition, wildlife and game species also receives an inordinate amount of attention by comparison to plants. Fish and game are considered to be men's foods, women's foods are native species of plants for which considerably less funding and research has been conducted. Nurses at Nimiipuu Health, and a select few garden volunteers have championed the creation of more community gardens for over a decade in order to provide produce for patients who said that if the nurses could find a way for them to afford produce, they

would eat it. This project would increase gender equality and nutrition within the community while also increasing food security and climatic resilience.

Science and Traditional Knowledge:

Both traditional knowledge, local knowledge from farmers and gardeners, and science will be applied to this effort. The tribe has a specific process to protect traditional knowledge, and as a result we are collaborating with the Cultural Resources Division to ensure that this effort is transparent, vetted, and follows their process and guidelines. In addition, they will review all final documents and decide what can be released to the public, and what must be kept in the community.

In addition, we will be completed semi-directed interviews of four gatherers/gardeners who are well known in the community. The data from these interviews will be compiled in tabular form, and with permission, the interviews will be recorded as part of a film process.

We will also be reviewing the scientific literature, and utilizing climate science we have already compiled with information about crop suitability zones, and freeze free zones. In addition, we will be consulting with experts at Washington State University and the University of Idaho, and adding to our literature review using the climate analogues project from Dr. Abatzougou's lab at the University of Idaho. We will also be using the Tribal Climate Tool developed by the University of Washington for future projections, and the BIA Tribal resilience website.

Tribal Capacity Building:

This this project is a first step towards involving gatherers in collecting data about what is happening to traditional plants. There is a concurrent Cultural Based Observation Network project at the tribe, and we hope that through this project, and working with the National Phenology Network that this project can include some scientific observations at gathering sites, but plan to broach this topic in the course of this project in a delicate manner because it is so sensitive. This is part of our capacity building needs, to involve gatherers and youth in collecting data about plants.

This project is a planning project to help the tribe identify needs, and to include specific food sovereignty work in their community planning process which includes planning for off-grid energy storage, electric charging stations, a new building to house tribal offices under one roof, and a new social services building that houses multiple programs in the same location. In addition, we hope that this project will help us develop a partnership with Washington State University's crop research program. WSU is doing innovative research on farming techniques and gardening in this region.

In Kind Support

We are partnering with the University of Idaho Extension Program to complete this project, and their contribution could be considered to be in-kind support. The extension program provides assistance for the community garden, and education classes. Staff time from the extension program will be approximately 5 to 10 hours a week, and will include outreach, location information for resources, background data, and planning support.

In addition, the Tribe is recruiting an Americorps Vista volunteer in order to work on energy funding and policy in concert with the tribal resilience team and climate change and energy subcommittee. The Americorps Vista program is supporting this position as the Tribe is a new site. The work of the vista program is included in this proposal the Vista Volunteer will be working to secure funding for the Lapwai Food Trail and for a Community Garden Coordinator. They will also be helping the tribe make comments on energy and food policy in support of our new climate change and energy subcommittee which has just started to involve leadership in policy comments, support, and project development.

Reporting:

The Tribe will provide quarterly project progress updates, and a final written report that demonstrates completion of tasks outlined in this proposal. Quarterly reports will include status updates, a list of expenditures, and the budget remaining.

Qualifications:

We enclosed resumes of the primary staff leading this effort, but do not have particular qualifications that need to be included in the proposal for the tribe.

Partnerships:

This project includes collaborating with the University of Idaho Extension Program, cultural resources, and the Communications Program to work with youth or young adult small film project for this project. We will be offering participants a small stipend, and travel funding. We hope to teach young people how to record video, take good photos, and do simple film editing. This was suggested by one of the young gatherers who is working to educate youth about gathering and gardening, and is a current Americorps Vista volunteer recruiting help for the community garden, and offering education classes. She will soon be on the board of NW Documentary, and is searching for projects to work on.

Budget:

Please see the following budget and tabular narrative. The budget includes staff time to complete the project, funds for youth to travel around the reservation to interview elders, and to purchase supplies for youth to help document some of these practices. The budget worksheet is enclosed as an attachment and includes the calculations that were utilized to arrive at these numbers on workshop 1 (BudgetCalcTemplate2020Fringe)

<i>Budget Item</i>	<i>Proposed Budget</i>	<i>Comments</i>
Salaries	\$63,437.45	Includes: 50 weeks pay at full time, 100 weeks at half time for Climate Change Coordinator (Professional III, Grade 20, Step 1, 3% COLA); 13 weeks pays for climate change specialist, (Professional I, Grade 17, Step 1 +3% COLA). Employee time will be spent on project coordination, gathering geospatial data, working with education programs, youth, and elders to document food resources, and work on a short film about food sovereignty for the tribe, meeting with stakeholders to design food trail, meeting with stakeholders to discuss alternative locations for community gardens and/or food forests with traditional foods, and searching for funding for a full time garden coordinator and educator.
Fringe Benefits	\$40,977.07	26 full pay periods, ~fringe including family medical rate for one Pro III, and 6 pay periods for one Pro I.
In-Kind from UI Extension Agent	5 hours per week for one year	The UI extension agent will be a project partner in this endeavor, and half pledged hours to complete the project. Her education program is complementary to this effort, and will include classes, outreach, and distribution of information about the project.
Training/Travel	\$2,900.00	Funds for traveling on the reservation to map food resources, for youth to travel to visit with elders, for youth and instructors to travel to do filming project, and for group trips to gathering sites, and for local travel to regional food meetings
Supplies	\$4,250.00	Outreach, Education Supplies: \$400
		Cameras or ipads, tripods, gopro drone, software & data Hosting for website: \$3,400.00
		Coffee, tea, and light refreshments for 2 gatherings.
Stipends and Honoraria	\$5,500.00	Honoraria for elders: \$1,000
		Stipends for youth and for volunteers: \$4,500.00
Subtotal	\$117,064.52	
Indirect 28.1	\$32,895.13	Negotiated Cost Agreement Attached
Total Costs:	\$149,959.65	



Map 1. Lapwai Valley where the project will be based.