Module #4 Place-Based Identities: Nimiipuu (Nez Perce)

The Nimiipuu (Nez Perce people) are known for being one of the more dominant tribes of the Northwest United States pre-contact. Their homelands span throughout present day territories of Washington state, Oregon, Idaho, Montana, and Wyoming and consist of mountain, prairie, canyon, and river ecosystems that provided an abundance of travel routes, foods, medicines, tactile materials, and spiritual offerings. Throughout Modules 4 – 6, the place-based identity of the Nimiipuu will be introduced, along with historical and modern contexts of preparation and adaptation in response to hazards, and the profound resilience of Nimiipuu that has continued for millennia.

Learning Outcomes

- Gain appreciation of the Nimiipuu worldview.
- Describe values, relationships, balance, and responsibility of Nimiipuu with their homelands.
- Consider Nimiipuu values, relationships, balance, and responsibility in emergency management.

Outline

- Exploration Activity: An activity assigned at the beginning of the module where students view videos of the Nimiipuu and take detailed notes addressing themes of place, identity, colonization, and resilience.
- Opening Discussion: A class discussion where students share their video notes based on the themes and common values are identified.
- **Module Content:** Informational content offers insight into the place, identity, colonization, and resilience of the Nimiipuu.
- Holistic Understandings: Assigned as homework, students write a reflection on the Nimiipuu worldview (values, relationships, balance, and responsibility) and describe considerations for emergency management/response on Nimiipuu homelands.



EXPLORATION ACTIVITY (SLIDES 4 - 5)

The Nimiipuu worldview is difficult to communicate through text alone. To hear the language, see the people and places, provides insight into the Nimiipuu worldview. To truly understand though, is to speak the language, have a reciprocal relationship with place, know the stories and honor the responsibility of protecting and healing place.

Directions: Assign students various video options below to learn about the Nimiipuu. Each of the videos communicate aspects of the Nimiipuu worldview. The opening discussion for this module will be based on the videos. During the video, complete Cornell Notes (template in Appendix A) while considering:

- The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)
- Values of the Nimiipuu
- Examples of Nimiipuu relationships with light, spirit, air, water, and earth
- Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)
- The impact of capitalism, imperialism, and federal law and policy experienced by the

Nimiipuu

Examples of resilience exhibited by the Nimiipuu

Video List:

- Option 1: Nimiipuu: http://youtu.be/aTSNXhhqvOs
- Option 2: Closing the Circle #1: http://youtu.be/NVIKuPIAOcw and Closing the Circle #2: http://youtu.be/AxwrQhMEOoU
- Option 3: Wisdom sits in places: The Nimiipuu land: Angel Sobotta at TEDxLCSC: http://youtu.be/7WuaUXLqRTg
- Option 4: Surviving Lewis & Clark: The Nimiipuu Story:
 http://www.archaeologychannel.org/video-guide-summary/155-surviving-lewis-a-clark-the-nimiipuu-story?fbclid=lwAR13ChrzqLSTmQEG6wcJl76xlwy-tHJEvBhSzbWb5E2WkxG22_xRDqASUHI

Find the Cornell Notes Template in Appendix A.

OPENING DISCUSSION (SLIDES 6-8)

Read the excerpts from the book Noon Nee Mee Poo (We, the Nez Perces):

"This is the history of the Nez Perce Nation, whose aboriginal domain was located in the north central part of Idaho, southeastern Washington, and northeastern Oregon, land comprised of approximately thirteen million acres of land. From time immemorial, they were identified as the Tsoop-nit-palu, which means 'the walking people.' The people were also known as the Nee-me-poo (We, the people).

Upon the arrival of the Lewis and Clark expedition in 1805, through a so-called interpreter, they were given the name of Nez Perce, a French translation meaning pierced nose. This is somewhat ambiguous, as it was a known fact that the Nee-me-poo tribe, as a whole, did not practice piercing their noses and wearing ornaments, like many authors have described. However, in the early days, other tribes were known to have pierced their nose. These people lived on the lower Columbia River and in other parts of the Northwest.

The Nez Perces were considered to be a noble and intelligent people. Basically a peaceful nation, this book will tell of Nez Perce skirmishes with other tribes and federal troops where Nez Perces able to demonstrate superior skills and knowledge of warfare.

The book relates the many hardships, social and economic depressions, broken treaties, federal-tribal relationships, and the struggle to obtain the white man's education. It will also describe living habits, customs, and cultural values of the Nez Perces. A new age will also be seen, an age which portrays the Nez Perce people regaining their place in an upward movement for the advancement of their social and economic well-being. Thus, we present the Nee-me-poo.

The Indian must learn that the entire history of man shows that pride is in fact a virtue and self-pity the deadliest of sins. His own history shows that he fought the white man valiantly, and – in accordance with his own, equally valid standards of warfare – cruelly. History shows that he lost, as he had to lose, but that he fought, like a man, like a true American. He owes nothing for having fought. The owing comes from his acceptance of the degradation imposed on him afterward, for the fact that the white man made a willing artifact of him for the solace of the white man's troubled soul. He has become something to possess, fought over by the missionaries on the one hand and the universities on the other. For this misuse, the white man owes him a chance to make his own choice once more, good or bad. Nez Perces used to be a strong people, breeders and traders of the horses by which the Plains Indians became the fierce Warriors the white man feared. The Nez Perces still raise horses and cattle with the limited land based remaining. They have their water, their rich forests to produce timber, their grazing land, their wheat farms to feed the city dwellers, their quarries to yield minerals needed by the white man's technology, their art to delight the outsider, and most of all, their country, into which they can admit the white men as visitor, to see an experience for a little while a life and a land he destroyed for himself" (Slickpoo et al., 1973, p. iii - iv)

"...Our homeland is located in present day North Central Idaho among some of the greatest hunting and fishing grounds of the nation. Elk, deer , bear, mountain goats and sheep, moose, and cougar have roamed the forests and cliffs from time immemorial and the fast, clear streams and alpine lakes are filled with fighting fish. Some of the most rugged terrain is beyond reach of all but the boldest adventures. The deep canyon country of the Salmon and Snake rivers is guarded by the Seven Devils. In this region, in which even packhorses often failed to find footing, are the Imnaha,

the Grande Ronde, Joseph Creek, and Hell's Canyon, the latter more than 2,000 feet deeper than the Grand Canyon of Arizona.

We call ourselves Ne-mee-poo, which means the 'real people', or 'we the people.' The names given to us by outsiders usually are based on habits or traits they attributed to us. We are called 'dark brown' by our Sahaptin neighbors to the west because we are supposed to have darker skin than other tribes in our area. But we ourselves call our neighbors Sukuy Sukuy, which also means 'dark brown skin', especially those who lived in low, arid areas, including the Columbia River. People to the south call us 'people under the tule,' apparently referring to our type of dwelling or sometimes 'khouse eaters' because of our liking for the edible root, khouse. It is not certain where the Blackfoot Indians derive their name for us which means 'dark blue or dark green.'" (Slickpoo et al., 1973, p. 1)

"...Blue earth Indians and blue mud Indians may refer to the color and material of our face paint.

Archaeologists now tell us that we have been living in America upwards of 20,000 to 30,000 years period. Many of the earlier guesses as to our origin have been based either upon biblical stories or upon tales contained in classical literature. American Indians have been suspected of being descendants of Egyptians, Phoenicians, Greeks, Romans, Chinese, Japanese, Welsh, Irish, or people who made their way from a lost continent of Atlantis or Mu. Some people have even suggested that we are the descendants of lost tribes of Israel.

Archaeology has shown that Indians have been here a long time. They have found human bones and artifacts at Marmes Cave on the edge of Nez Perce territory dating from the last stages of the great ice age. Within the present Nez Perce territory, humans inhabited the Weis Rockshelter site from about 5,400 BC to 1,400 AD. Here, there are indications of volcanic ash deposits from Mt. Mazama, whose terrible explosion covered the northwest. The Weis Rockshelter is located in Nee-pe-ha (presently called Graves Creek near Cottonwood, Idaho.

Some of our legends may describe this earlier age. For example, elderly Nez Perces relate the time when the Tah-seeh was hunted in the area. The Tah-seeh was a huge, hairy animal resembling the musk ox, which may have been around here during the last days of the ice age. Others describe giant elk of the size that fed the Marmes man. There is some connection too between the present-day elk (female) which is called Tah-seeh.

Some of our elders also relate traditional stories of huge birds that could pick up and fly away with a human being. These huge birds were called Khoo-sa. Maybe they were the huge condors that once flew in Nez Perce country.

Anthropologists say that we speak a language related to many other Penutian languages of the Northwest, California, and possibly even Mexico. The many centuries necessary for our ancestors to have spread so far shows that we have existed as long as any other culture. We are proud of ancient history which our own traditions have preserved and which science is helping to reveal." (Slickpoo et al., 1973, p. 5)

The excerpt describes the Nimiipuu homelands as stretching across northcentral Idaho into Washington state and Oregon, made up of mountains, rivers, canyons, prairies, and forests. A history that dates back thousands of years is apparent in the landscape and within the culture. The Nimiipuu value their sacred homelands. They have relationships with sacred places and with plants, animals, and non-human beings; these understandings have been passed down from generation to generation orally, before a written language was practiced. There are multiple facets of colonization

expressed, including reduction of accessible territory to practice cultural lifeways of hunting, fishing, gathering; removal of land means removal of sacred, living and giving places. Further imposition of colonial frameworks about and onto the Nimiipuu included misnaming them (i.e. pierced noses – Nez Perce), forced assimilation through missionaries, academics, politics, and the economy which led to changes in the homelands of the Nimiipuu still present today.



OPENING DISCUSSION

For each theme below, ask students who watched each video to provide a synopsis and insight:

- The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)
- Values of the Nimiipuu
- Examples of Nimiipuu relationships with light, spirit, air, water, and earth
- Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)
- The impact of capitalism, imperialism, and federal law and policy experienced by the Nimiipuu

Task: As a class, develop a list of values prevalent in Nimilipuu culture.

MODULE CONTENT (LECTURE, SLIDES 9 – 37)

1 Place (SLIDES 10 – 11)

The video excerpt from *ná-qc tim*ine wisix: Of One Heart describes the Nimiipuu homelands and relationship to place. Watch the video at: http://vimeo.com/151098037

Read the excerpt from the book Noon Nee Mee Poo (We, the Nez Perces):

"We also had friendly relations with many of our neighbors in the Northwest, Great Basin, and Plains. Early white explorers observed our ancestors regularly in such places as southern Oregon and Idaho. They were also seen in the Willamette Valley, the western Great Plains, at the confluences of the Spokane and Little Spokane, the Snake and Columbia, the Deschutes and Columbia, the John Day and Columbia, the Yakima and Columbia rivers; and at principle fisheries such as those found at Celilo, Kettle Falls, Willamette, and Spokane Falls. The Nez Perces were probably the most traveled tribe of the Northwest, and with their neighbors, the Cayuse, were the military masters of the Plateau and strong contenders for dominance in the western Plains and the Plateau region.

Our ancestors were the only direct link between The Dalles-Celilo region and the northern Plains, and our importance as traders is well known. We and other Plateau tribes held annual trade fairs at The

Dalles and Celilo Falls, the Yakima Valley, and at Walla-Walla. An early white explorer described one of our trade fairs as follows:

'We had scarcely advanced three miles when a camp of the true Mameluke style presented itself; a camp of which we could see the beginning but not the end! It could not have contained less than 3,000 men exclusive of women and children and treble that number of horses. It was a grand and imposing sight in the wilderness, covering more than six miles in every direction. Councils, root gatherings, hunting, dancing, drumming, yelling, and thousand other things which I cannot mention, were going on around us.'" (Slickpoo et. al., 1973, p. 24)

The place of the Nimiipuu was not a wilderness, but a well-maintained ecosystem developed through the understanding best described by Too-Hool-Hool-Zute (which was recorded in the late 1800's), "The earth is part of my body... I belong to the land out of which I came. The earth is my mother." (Josephy, 1971) This includes an inherent relationship with the land, the earth and spirituality that Western science does not capture in their approach through integrated resource management.

2 Story (SLIDE 12)

Stories describe place, interactions, characteristics, and values and have been passed down orally for thousands of years. Read the excerpt from the book Salmon and His People: Fish and fishing in Nez Perce culture:

"The following Nez Perce creation story explains the origins of other geological features as well as the important reciprocal relationships the Creator established between the animals and human beings.

A Meeting Between Creator and the Animals

On one of the slopes of the Clearwater River near Lewiston, Idaho, there are a lot of rounded stones going up one of the draws. As you look along the ridgeline there are also other rocks of all different sizes and forms, but most of them are very large. Some of these are referred to by the Nez Perce as the "large animals." They are the remains of the large animals before there were human beings. The Nez Perces have always known that at one time there were large animals that inhabited this country because we find large bones in the ground between Clarkston and Pasco. The creator called all of these large animals together telling them that there was going to be a great change, and he said that some of them probably wouldn't survive. Many of the animals were late to the meeting that the creator had called and as a result were turned to stone. So creator called all the large animal people together and said there was going to be a great change and that he wanted all of the animals to qualify themselves for a new kind of human being that would be coming as a result of this great change. Creator wanted to know what was going to be qualified to help these new human beings when they came because those human beings were going to be naked, they were going to have a hard time making a living. The Creator said, 'I want each one of you to come forward and be qualified to help these new human beings when they come.' So all the animals had to come up and be qualified.

The Nez Perce people could describe every animal including the birds, fish, and insects that they knew of with this story. This is one story that they could relate for days and days to the young people and tell them how they used these species to survive.

So Deer, he comes out and says, 'I want to have horns that come up and branch out, and I want to have big ears so I can hear well, and I want a little short tail with a black tip on it. These no human beings when they come can use my horn to make arrows and Flint knives, and they can use my hide for clothing to keep warm, and they can use my hooves to make rattles to sing their songs with.' So Creator said, 'You act the way you want to act, and that's the way you will be," and that deer is what we call mule deer today.

Well, another deer came forward and said, 'I don't want to be like that one. I want to have horns that come up a different way and then branch out. I don't like large ears and I want a tail that's longer,' and so he described himself how he wanted to be, and he also said that the new human beings could use his body parts and also his brains to help them tan the hikes and make them soft and white. That deer was called Blacktail deer. The Creator said, 'Okay, you are qualified to help these new human beings when they come.'

Another deer came forward and said... Then Moose came forward and said... Then Elk came forward and said... Then Eagle came forward... Then Crow came forward... Then Bee came forward... Spider came forward... Salmon and Steelhead came forward... Sockeye Salmon came forward... Trout came forward... Eel [lamprey] came out...

The last animal to be qualified was Coyote. Coyotes came out, and he couldn't get qualified. He tried to be qualified to do something, but he couldn't even talk. When Coyote talks, it sounds like two or three coyotes talking at the same time. So he couldn't get qualified, and finally Creator said that he would take pity on him. He said, 'Because you can't get qualified I'll give you special powers. When these new human beings come, you will have all the faults and all the traits that this new human being will have. That's what you will be able to do, but I'll give you some special powers beyond that. You will be able to transform and change yourself, and you will be able to get out of bad situations in order to save yourself, and you will be able to get out of bad situations in order to save yourself. You will also be able to teach these new human beings many things.' Creator said, 'I'll make you qualified but you'll get to be gray. You won't have any other colors.' That's the way Coyotes was created, and that's how Coyote became qualified to help new human beings.

About this time Grizzly Bear spoke up and said, 'What are we going to do about day and night? I want six months of night and six months of day.' Chipmunk perked up and said, 'We can't have that. I want one day and one night.' So Chipmunk and Grizzly Bear started to argue...Finally, Creator told the two of them to go off to have their argument, and he told them that whoever won the argument would determine the way the new world would be created. So Grizzly Bear and Chipmunk went off and continued arguing.

After a long time, Grizzly Bear started to get tired, and he was trying not to go to sleep but Chipmunk was still going strong. Finally, Grizzly Bear got so tired that we went to sleep. Chipmunk yelled, 'I won, I won, there will be one day and one night when those new human beings come.' Creator replied, 'That's the way it will be from now on, one day and one night.' Soon, Grizzly Bear awoke and found out from the other animals that he had lost the argument. This made him angry and he started chasing Chipmunk. As Chipmunk was trying to get away, Grizzly Bear put out his claws and scratched Chipmunk on the back, and that is why today the Chipmunk has black and white stripes on his back.

-Allen Pinkham (Nez Perce)" (Landeen and Pinkham, 1999, p. 4-8)

3 Identity (SLIDE 13 – 23)

Nimiipuu identity is linked through time and space through place, community, and values that persist today. Read the following quotes from Nimiipuu people of the past and present that describe who they are and their worldview:

"...historically [we] did not use gill nets. They used to make a lot of hooks out of [Indian hemp]. We would hold it, braid it, and it couldn't break. We would peel the bark off of it. Sam Watters made hooks like this... You had to roll it a lot to make them. We also made antler and bone hooks. -Lyman Scott" (Landeen and Pinkam, 1999, p. 94)

"Our traditional relationship with the earth was more than just reverence for the land. It was knowing that every living thing had been placed here by the Creator and that we were part of a sacred relationship... entrusted with the care and protection of our Mother Earth. We could not stand apart from our environment. – Elsie Maynard" (Landeen and Pinkam, 1999, p. 52)

"We didn't make the skies bring rain, we didn't make the roots grow, we didn't make the salmon run. When it was time for the salmon to run, we moved down to the rivers, and when it was time for the foods and medicines to grow, we turned into the mountains. We moved in reference to the landscape and to the resources that nature provided to us. -Jaime Pinkham (Nez Perce Tribe of Idaho, 2003, p. 70)

"I want you to understand that there was another aspect of life already here when the non-Indian people came to this country. It was a good life. Sure, we had our difficulties before the white man came, but they were difficulties that had more to do with the battling of elements. In our stories we would learn how to survive the harsh conditions that could be imposed by the elements. -Allen Pinkham" (Nez Perce Tribe of Idaho, 2003, p. 4)

"For all intents and purposes the first official agreement between the Nez Perce and the government of the United States occurred in 1805 with the Lewis and Clark expedition. Lewis and Clark were official representatives of the United States and entered into a 'peace and friendship' agreement with the Nez Perce and other tribes. The Nez Perce took this agreement very seriously and often referred to it in their subsequent negotiations with the federal government" (Nez Perce Tribe of Idaho, 2003, p. 20)

"We do not want churches because they will teach us to quarrel about God, as the Catholics and Protestants do. We do not want that. We may quarrel with men about things on earth, but we never quarrel about the Great Spirit. -Chief Joseph" (Nez Perce Tribe of Idaho, 2003, p. 12)

"Even when I was a boy we got into the habit of hiding our fishing gear because of the fear of being hassled by the local law enforcement officials. It was always a touch and go situation... Many times we used to fish at night even when we were gaffing for suckers so we could avoid being harassed. - Wilfred Scott" (Landeen and Pinkam, 1999, p. 114)

"Our animal legends have a lot more truth to them than many think and there are a lot of lessons we can learn from our brothers and sisters who live on the land, in the air and water. It is important to observe animals and pay close attention to them and do things that will preserve them. If we lose the animals because of pollutions which we have made, we will be next. – Leroy Seth (Nez Perce)" (Landeen and Pinkam, 1999, p. 1)

"We learn a lot of lessons from watching animals. The salmon are one of our best teachers. We learn from them that we have to do certain things by the seasons. We watch the salmon as smolts going to the ocean and observe them returning home. We see the many obstacles that they have to overcome. We see them fulfill the circle of life, just as we must do. If the salmon aren't here, the circle becomes broken and we all suffer. – Leroy Seth (Nez Perce)" (Landeen and Pinkam, 1999, p. 3)

4 Seasonal Round (SLIDES 24 – 25)

The life cycle of the Nimiipuu correlates to the daily rhythms and seasons of the land. "Every activity and cultural practice fitted into a 'seasonal cycle or round.' There was a pattern to this movement. It was a purposeful journey rather than random wandering. Families and bands traveled to their usual and accustomed places for hunting, fishing, and harvesting roots and plants." (National Park Service, n.d.)

The image of the Nez Perce Seasonal Round is a limited representation of the seasonal names and related plants, animals, and tools. Language carries deep knowledge of place, time, and values. One example illustrated is Latıı́ta'aal (lah-teet-al) is commonly associated with the month of March, but the word latıı́ta'aal translates to "flowering season" and comes from the root word latı́, the verb, "to bloom."

Read the excerpt from the National Park Service:

"[the Nimiipuu] used the seasons of the year as a means to keep track of time and to guide the major activities & celebrations in their culture. This is often referred to as "the seasonal cycle" or the "seasonal round"... They did not use a 12 month calendar or watches like we use today. The length of a particular season would vary from year to year depending on; when cold or warm weather arrived, how dry or wet it was, when plants matured, when fish ran, etc. Having lived on dried foods all winter, spring was a time to gather the early greens and roots growing in the low river valleys that made good winter home sites. The men began fishing as soon as the run of spring Chinook started up the river. The snow would be starting to melt out of the mountains and as the run of salmon ended the bands would begin moving to higher elevations. Women and younger children concentrated on harvesting whatever plants were in season and ripe. Women cooked the foods and preserved extra by drying it. Nimiipuu women also were in charge of the home. They gathered the materials needed to make it, prepared them, made it, put the home up, took it down and moved it as needed. Large game would become more accessible for hunting by the men as the snow retreated through the spring and summer. Men were also ready at all times to protect their family and band if the need arose.

Bands began to move toward the end of spring, and through the summer they would often meet other Nez Perce bands. It was a good time for socializing with friends and relatives you might not have seen for a year. Through the summer, as some of the bands stayed in the mountains to continue gathering and hunting, others would return to the rivers to fish the summer run of Chinook. As fall approached, gathering foods and supplies for winter became the primary concern. Everything needed to make winter clothes, new tools, and other items would be collected during the fall.

Winter brought with it a return to the deep, warmer river valleys where the rivers and streams provided needed water and wood for fuel. Winter was a quieter time; a time to stay at home, to make tools and other items, pass on the ancient stories and conduct ceremonies."

5 Elements (SLIDES 26 – 27)

The elements – spirit, air, fire, land, water– are intricately connected and the knowledge is embedded in Nimiipuu stories, language, and values.

Read How Beaver Stole Fire from the Pines and consider the elements:

"Once, before there were any people in the world, the different animals and trees lived and moved about and talked together just like human beings. At this time the pine-trees had the secret of fire, and guarded it jealousy from the rest of the world, so that, no matter how cold it was, nobody could get any fire to warm himself by, unless he was a pine. At the length an unusually cold season came, and all the animals were in danger of freezing to death because they could get no fire; but all plans to find out their secret from the pines were in vain, until Beaver hit upon one which proved successful.

At a certain place on the Grande Ronde River, in Idaho, the pines were about to hold a great council. They built a large fire at which to warm themselves, after coming out of the icy water from bathing, and had posted sentinels round about to keep off all the animals and other intruders, who might steal their fire secret. But Beaver had hidden under the bank near the fire before the sentinels had been posted, and so escaped their notice. After a while, a live coal rolled down the bank close by Beaver, which he seized and hid in his breast, and then ran away as fast as he could. The pines immediately raised the hue and cry, and started after him. Whenever he was hard pressed, Beaver darted from side to side, and dodged his pursuers, and when he had a good start he kept a straight course. Hence the Grande Ronde River is very tortuous in some parts of its course and then straight for some distance, because it preserves the direction Beaver took in his flight.

After running a long time, the pines grew tired and decided to abandon the chase. So most of them halted in a body on the river banks, where they remain in great numbers to this day, and form a growth so dense that hunters can hardly get through it. A few, however, kept on after Beaver, but they finally gave out one after another, and they also remain scattered at intervals along the banks of the river in the places where they stopped.

There was one cedar running with the foremost pines, and although he despaired of capturing Beaver, he said to the few pines still in the chase, "Although we cannot catch Beaver, I will keep on to the top of the hill yonder, and see how far he is ahead." So he ran to the top of the hill, and saw Beaver far ahead, just diving into Big Snake River where the Grande Ronde enters it, so that further pursuit was out of the question. He saw Beaver dart across Big Snake River and give fire to some willows on the opposite bank, and recross farther on and give fire to the birches, and so on to certain other kinds of wood. Since then, all who have wanted fire have got it from these particular woods, because they have fire in them and give it up more readily than other kinds when rubbed together in the ancient way.

Cedar still stands all alone on the very top of the hill where he stopped in the chase after Beaver, near the junction of the Grande Ronde and Big Snake rivers. He is very old; so old that his top is dead, but he still stands as a proof of the truth of the story. That the chase was a very long one is

shown by there being no cedars within a hundred miles upstream from where he stands. The old people point him out to the children as they pass by, and say, " See, there is old Cedar standing in the very spot where he stopped chasing Beaver." (Packard, 1891)



The Elements in How Beaver stole Fire from the Pines

Task: From the story and the slide image, describe the intricate balance and role of the elements exhibited.

 Image caption: Adjacent creeks with and without beaver damming during a wildfire demonstrates vegetation near beaver ponds stayed green while other nearby riparian vegetation burned.

6 Changing Landscapes (SLIDES 28 – 34)

"The earth was created by the assistance of the sun, and it should be left as it was... The country was made without lines of demarcation, and it is no man's business to divide it...Understand me fully with reference to my affection for the land. I never said the land was mine to do with as I choose. The one who has the right to dispose of it is the one who has created it. –Chief Joseph"

The homelands of the Nimiipuu have drastically changed since colonization. The mountains, rivers, canyons, prairies, and forests had always been stewarded through the reciprocal relationship the Nimiipuu have held with their homelands, the plants, animals, and elements. Since colonization, their homelands have been detrimentally transformed.

The inherent relationship to place, the generations of experiences with the homelands still exists today, but too has been transformed.

"Article III of the Nez Perce Treaty of 1855 reserves the Tribe's fishing rights and goes on to reserve 'privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.'" (Nez Perce Tribe of Idaho, 2003)

"The United States' trust obligation includes a substantive duty to consult with ta tribe in decision-making to avoid adverse impacts on treaty resources and a duty to protect tribal treaty-reserved rights 'and the resources on which those rights depend' (Klamath Tribes v. U.S., 1996)" (Nez Perce Tribe of Idaho, 2003)

Although land ownership was never a Nimiipuu perspective, access to nimiiipuu'neewit (pronounced nee-mee-poo now-it, Nez Perce lifeways) is critical for the survival of the people, their culture, and the landscapes. The two cannot be separated.

"The allotment era is marked by the enthusiastic zeal of Christian and eastern philanthropic influences, both of which purported to be sympathetic to the plight of the great 'red man' but both of which were nevertheless essentially patriarchal and culturally arrogant in their attitude of knowing

'what was best' for us. These people fervently wanted the Indian people on reservations to adopt non-Indian ways. They encouraged this process by developing a system for individual ownership of lands, and in 1887 Congress passed the Dawes Allotment Act, ostensibly to teach Indians how to farm using European methods but also by providing individual Indian with an allotment of land." (Nez Perce Tribe of Idaho, 2003, p. 50)

"During the era of large-dam construction in the American West, the Pacific Northwest River Basins Commission designated the lower Snake River watershed as Region Six--an area the Nez Perces have called home since time immemorial (figure 1). The archaeological record demonstrates the antiquity of human occupation in Region Six with evidence that Aboriginal peoples have been living in the regions of the Snake, Clearwater, and Salmon rivers for at least eleven thousand years. (1) For countless generations, Nez Perce subsistence centered on the bountiful supply of anadromous fish whose "populations first reached levels of eighteenth- and nineteenth-century abundance around 5,000 years ago." (2) As a result, a complex "salmon culture" developed throughout the Columbia and lower Snake River watersheds as Indigenous groups utilized small-scale economic systems focused on the consumption and trade of anadromous fish. In the last two centuries, however, this mode of subsistence drastically changed, and now the Columbia and lower Snake River watersheds only vaguely resemble the wildly evolving character of its ancient and recent past.

Throughout the Columbia and Snake River watersheds, a complex system of earthen and concrete dams dramatically impedes anadromous fish from completing their 40- to 50-million-year-old quest to reproduce and survive. (3) In particular, the lower Snake River dams were constructed to provide Region Six with sources of subsidized electricity and economic security and to facilitate the shipment of agricultural commodities by barge to the centralized ports at the mouth of the Columbia River in Portland, Oregon. The dams and the agricultural economy they support, generate tremendous costs to the environment by radically altering one of the world's most prolific cold-river watersheds. This alteration disproportionately benefits specific elements within the global market economy and encourages increased production of surplus agriculture commodities and other land based enterprises throughout Region Six.

A framework for understanding this cultural history lies within the constructs of social power and culture scale. (4) Social power operates at an incrementally higher level in Euroamerican society than in an egalitarian Aboriginal society. For example, collective individuals and institutions steamrolled the Nez Perces and conquered their aboriginal homeland. The scale at which Euroamerican society has evolved since Lewis and Clark can be expressed exponentially, because the impetus to tame the 13-million-acre sphere of Nez Perce traditional territory deliberately crossed several scale thresholds. The contemporary Nez Perces struggle against an enormous non-Native power structure has increased since the Nez Perces were first removed and relocated to a reservation system during the mid-1800s. Currently, the Nez Perces face an overwhelming Euroamerican presence throughout their reservation, the adjacent counties, and Region Six. Large-scale agriculture is the major economic practice on the Nez Perce reservation, but, ironically, there is not one Nez Perce who farms in either Nez Perce or Clearwater counties. The farming economy is dominated by Euroamerican individuals, families, and corporations who have systematically benefited from government policies and the operation of new forms of power and scale." (Colombi, 2005)



HOLISTIC UNDERSTANDINGS (SLIDE 34 - 38)

The following excerpt is provided from the book Salmon and His People: Fish and fishing in Nez Perce culture:

"One of the limitations of Western Science is its inability to recognize the traditional environmental knowledge the American Indians have been passing down to each other in their oral histories for millennia... oral tradition is still very much alive among the Nez Perce people. Western scientists however, are unable to recognize this traditional environmental wisdom because it also contains spiritual and cultural aspects fundamental to the religious beliefs of many Native Americans, and these beliefs and values are simply impossible to quantify using the scientific method..."

"Sometimes I try to get people to compare plant and animal species with their own body parts. For instance, the buffalo could be a finger, the passenger pigeon another finger, the peregrine falcon another finger; the wrist could be the sockeye salmon. If you relate these body parts to these species, how many would you eliminate before you would say, 'Stop.' You can get along pretty well if you lose a finger, but if you keep doing that, when is it enough? I learned this philosophy from my elders. Even Joseph himself said, 'I am of the earth.' Well, if you consider yourself part of the earth, you won't sacrifice those body parts. – Allen Pinkham (Nez Perce)" (Landeen and Pinkam, 1999, p. 8)

Task: Assigned as homework, students write a reflection on the Nimiipuu worldview (values, relationships, balance, and responsibility) and describe considerations for emergency management/response on Nimiipuu homelands.



Additional Resources

- For additional information about the Nez Perce Tribe, visit <u>www.nezperce.org</u>
- For an additional module to understand the influence of Nimiipuu not only on Lewis and Clark and the Corps of Discovery, but also on American history and culture, visit http://www.lib.uidaho.edu/digital/L3/Sites/ShowOneSiteSiteID34.html
- Watch full length DVD, ná-qc timíne wisíx: Of One Heart, featuring the Nimiipuu (Nez Perce) people. Of One Heart shares perspectives of a people whose contemporary way of life is firmly rooted in tribal tradition. Of One Heart introduces the rich heritage of the Nimiipuu, whose stories are preserved and interpreted at 38 sites comprising Nez Perce National Historical Park in Idaho, Montana, Washington and Oregon. The DVD can be purchased at http://www.discovernw.org/nez-perce-of-one-heart-dvd.html

- For additional information and graphics for seasonal activities, visit:
 http://www.wallowanezperce.org/seasons-and-cycles
- To access the Nez Perce Museum Collections digital Seasonal Round Exhibit, visit: http://www.nps.gov/museum/exhibits/nepe/seasonal_round.html

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Appendix A. Cornell Notes Template

Video Title:	Scholar Name:
	Date:
	Notes/Definitions/
Themes	Examples/Sentences
The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)	
Values of the Nimiipuu	
Examples of Nimiipuu relationships with light, spirit, air, water, and earth	
Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)	
The impact of capitalism, imperialism, and federal law and policy experienced by the Nimiipuu	
Write a paragraph summary of the video focusing on the themes:	

Module #5 Preparation and Adaptation: Nimiipuu (Nez Perce)

The Nimiipuu (Nez Perce people) are known for being one of the more dominant tribes of the Northwest United States pre-contact. Their homelands span throughout present day territories of Washington state, Oregon, Idaho, Montana, and Wyoming and consist of mountain, prairie, canyon, and river ecosystems that provided an abundance of travel routes, foods, medicines, tactile materials, and spiritual offerings.

Modules 5 discusses the historical and modern contexts of preparation and adaptation in response to hazards.

Learning Outcomes

- Gain appreciation of the historical and modern contexts of the elements in considering hazards (climate change, floods, wildfires, and disease).
- Identify Nimiipuu cultural values in preparation and adaptation to hazards (emergency management/response).
- Consider the role of FEMA and/or agency representatives in honoring Nimiipuu values, relationships, balance, and responsibility in preparation and adaptation to hazards.

Outline

- Exploration Activity: An activity assigned at the beginning of the module where students view
 a video by the Nimiipuu and take detailed notes addressing themes of historic and modern
 relationships with the elements in considering hazards and cultural values.
- Opening Discussion: A class discussion where students share their video notes based on the elements and cultural values.
- Module Content: Informational content offers insight into the historic and modern relationships with the elements in considering hazards and cultural values.
- Holistic Understandings: Assigned as homework, students write a reflection on the role of FEMA and/or agency representatives in honoring Nimiipuu values, relationships, balance, and responsibility in preparation and adaptation to hazards.



EXPLORATION ACTIVITY (SLIDES 4 - 5)

As a sovereign nation, the Nez Perce Tribe perpetuates the resilience of the Nimiipuu in their preparation and adaptation to modern hazards. This module describes the historical and modern contexts of climate change, floods, wildfires, and disease.

Directions: Students watch the video and read the article about climate change and the Nimiipuu. This video and article should be reviewed before class. For both the video and article, complete Cornell Notes (template on the next page) while considering:

- Descriptions of the historical and modern contexts of climate change with examples/quotes
- Examples for each of the elements spirit, air, fire, and land
- Summary of the video and article.

Resource List:

- Video: <u>Blues to Bitteroots Coalition: Seasonal Round Trail Project</u>: <u>http://youtu.be/csMozN-pDvU</u>
- Article: Nez Perce Tribe: Clearwater River Subbasin Climate Change Adaptation Plan: http://www7.nau.edu/itep/main/tcc/docs/tribes/tribes NezPerce Clearwater.pdf

Find the Cornell Notes Template in Appendix A.

OPENING DISCUSSION (SLIDES 6-8)

The Nimiipuu have inhabited their homelands since time immemorial (beyond the reach of human memory). Archaeologists have dated the Nimiipuu back over 16,500 years when they uncovered 189 stone artifacts and bones of extinct animals at Nipéhe (now known as Cooper's Ferry near Cottonwood, Idaho). (Baker, 2019)

Read the article about Nipéhe, an ancient village of the Nimiipuu and archaeological site of the earliest evidence of humans in North America to date. Read the article which is included as a PDF in the module materials. (Baker, 2019)

Article: Baker, Eric. (2019, August 31). Digging up history. Lewiston Morning Tribune. http://lmtribune.com/northwest/digging-up-history/article-46f12938-f6c8-5b62-8dc5-b8c763b3442c.html

As the article states, "We know we have been here for a very long time... If anything [the archaeological findings are] a testament to the long relationship that our people fostered, that has endured a lot of cataclysmic activities - floods and all kinds of other activities - that have happened

on this landscape that our people have witnessed... [Nakia Williamson, Nez Perce Tribe Cultural Resource Program Director]."

Thousands of years inhabiting the landscape, means that the Nimiipuu have held ancient relationships with mammoths and other extinct plant and animal relatives, endured dynamic regional floods (Bonneville and Missoula floods), and in 200 years witnessed the conversion of diverse grassland prairies to monoculture agricultural fields, maintained forests to fire-suppressed or clearcut timberland, the decimation of wetlands and intensely channeled waterways. Among these changes to the homelands overtime, complex problems of climate change and disease are equally apparent in the community.

Begin this module by watching <u>Grandmother Tessie Williams – People of the Seventh Fire</u>: https://youtu.be/mxyYORIFohQ

As a sovereign nation, the Nez Perce Tribe perpetuates the resilience of the Nimiipuu in their preparation and adaptation to modern hazards. This module describes the historical and modern contexts of climate change, floods, wildfires, and disease.

Watch <u>Continuity of Operations Planning for Tribal Governments</u>: https://youtu.be/dm476MnqpRY and reflect on the preparation and adaptation of the Nimiipuu in relationship with their homelands.



OPENING DISCUSSION

For each theme below, ask students to provide a synopsis and insight: The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)

- Summary of the video
- Summary of the article
- Descriptions of the historical contexts of climate change with examples/quotes
- Description of the modern context of climate change (examples/quotes)
- Examples for each of the elements spirit, air, fire, land, and water

Task: As a class, develop a list of values prevalent in Nimiiipuu culture.

MODULE CONTENT (LECTURE, SLIDES 11 - 35)

1 Introduction (SLIDES 11 – 13)

"Tamálwit is the law that binds us to and makes us accountable to this land" – Nakia Williamson, Nez Perce, 2018. (Tamá-lwit, 2021)

"... the Nez Perce land and the Nez Perce people [are] inseparable, a part of the vast area stretching between the winding waters of the Wallowas and the highest crests of the Bitterroots. [They shared] a common language and culture, the Nez Perce moved within this region enjoying what the land provided – roots and berries, fish and game, shelter and clothing and fuel – and derived from it both a sustainable economy and a rich spirituality. Strong families formed villages, and villages the tribe, the Nez Perce people were in harmony – with their land, with their people, with their Creator." – Reflections on the Nez Perce National Historic Trail, Chief Joseph Band of the Nez Perce – 1999 (Nimiipuum Wetes, 2021)

In reference to the observations of Don Sampson (Chief of the Walla Walla Tribe and member of the Confederated Tribes of the Umatilla Indian Reservation) upon arriving at the 2015 Paris Climate Accord "Indigenous people from around the world to represent their livelihoods, their cultures, their homelands, and ultimately their fight for their survival. I heard them speak passionately about their beliefs and their sacred obligations for the earth and all life. Indigenous people have fundamental values that all of us need to understand, evaluate, and embrace to restore our global balance and perpetuate human kind." Ancient sacred truths and laws given to us at the beginning of creation.

- 1. Respect for the land, respect for the water, Mother Earth and all of creation. Tamálwit, the great law, value
- 2. Everything is interrelated and inter-reliant, we are all one family.
- 3. Reciprocity the practice of exchanging things for a mutual benefit. Everything we do to the earth we do to ourselves. We do not have the right to exploit resources.



LIGHTENING ACTIVITY

This is an activity designed for an example of each element – spirit, air, fire, land, and water – to be identified by students based on Don's description of climate and energy throughout Indigenous communities nationwide.

Listen to the presentation offered by Don Sampson: climate hope, clean energy determination and a just transition: http://youtu.be/SiDV6TYz7Jc

Climate change was previously explored in the opening discussion and additional information will be reviewed in this section of the module. After reviewing the climate change section, flooding, wildfires, and disease will be introduced. Review each of the section introductions, then assign students one of the remaining three hazard to investigate (watch video and read article). After time exploring the content, ask students to provide a synopsis and insight:

- 1. Summary of the video(s)
- 2. Summary of the article(s)

- 3. Descriptions of the historical contexts of climate change with examples/quotes
- 4. Description of the modern context of climate change (examples/quotes)
- 5. Examples for each of the elements spirit, air, fire, land, and water

2 Climate Change (SLIDE 14 – 20)

The Nimiipuu are aware of climate imbalances on their homeland because of their attune relationships with the land - specifically to food and medicinal sources. Parts of Nimiipuu culture have evolved with the relationships on the landscape such as the language, Nimiipuutimpt, and stories, which explain the intimately shared relationships the people have to the land and everything that survives in harmony with it.



Climate Considerations

Visit the Tribal Climate Tool of the Pacific Northwest and Great Basin Tribes.

This tool is designed to help tribes in the Pacific Northwest and Great Basin, understand how the climate is expected to change in places that they care about. It provides maps, graphs, tables and descriptions of projected changes.

The areas of interest (e.g., ceded areas, watersheds) included in this tool reflect results of outreach to Northwest and Great Basin tribes, as well as tribally-relevant areas in the public domain (e.g., reservations). These areas are shown for educational purposes only and are not intended to be legally binding.

Link: https://climate.northwestknowledge.net/NWTOOLBOX/tribalProjections.php

Consider: What is the true extent of the Climate Crisis for Nez Perce People?

The timeline on Slide 16 provides insight into Nimiipuu climate planning process, which extends back to the ice age (or even further). Review the timeline starting at the top left and read each informational text box. The column on the right side of the timeline, labeled "2020" provides modern and current approaches of the Nez Perce Tribe Climate Change Program.

Some of the most significant changes to the homeland of the autonomous bands of Nez Perce people are shown on Slide 17. Growing conflict compelled the Nez Perce and the United States to negotiate a treaty in 1855. The basis of the negotiation was land taken by the U.S. for its citizens in exchange for recognition of inherent rights, sovereignty and homeland. Since this treaty negotiation garnered the greatest support from the autonomous bands of Nez Perce a vast majority of them signed. Another result of the contract was the autonomous bands of Nez Perce people are a federally recognized tribe. The Nez Perce reserved a portion of their homeland, which became known as the Nez Perce Indian Reservation and is outlined on the map in magenta. Only eight years later, the United States returned for another treaty negotiation. This time the U.S. negotiators utilized an unjust and immoral strategy. Seeking to establish a significantly reduced reservation, the U.S. negotiators

focused on acquiring the support and signatures of those autonomous band leaders whose land would lie within the boundary of the new significantly reduced reservation. Nez Perce Treaty of 1863 (yellow), and the Nez Perce Indian Claims Commission Territory (orange).

These territories include areas of cultural significance to the Nimiipuu, and in the context of climate change, the seasonal gradient of significant seasonal food gathering, hunting, and fishing sites. The food that is honored first in Plateau ceremonies is Kuus, or water. The watersheds represented in this figure are a part of the Columbia River, which is among the most heavily dammed river system in the world. Without healthy open waterways, we restrict the natural travel of migratory fish, which sustain cultural life-ways. These anadromous species include steelhead, salmon, and lamprey.

To gather their foods, hunt, or fish is a cultural practice, and so intimately connected to spirituality that for the Nez Perce, these things are not one without the other. We draw physical sustenance from these foods, and they are nourishing in many more ways. Their relationships with these foods are like the shared relationships between each plant and each season. The relationships also express connections between plants and people because it is family who teach you about the locations of these foods as well as how to prepare them and put them away for sustenance in the winter months.

Nez Perce people are known to follow a transhumance pattern of nomadism, which means they are at specific locations when resources are available and they keep to this seasonal round annually. They are moving camp to gather, hunt, and fish with the seasonal availability of foods as temperatures allow movements.

On Slide 18, is the silhouette of Nez Perce Tribe reservation and Usual and Accustomed Areas defined by elevation and distance of significant cultural sites. The entirety of this graph represents Nez Perce homeland. Smaller fractions of this area include ICC Territory, NPT Reservation in 1855, and NPT reservation 1863 - which lead into the Nez Perce War. The following are translations of these cultural sites: Wileemece (Willamette Falls), Weck'upupe (Something sticking on the sides/lamprey eels/ The Dalles, Oregon), Hanford Nuclear Reservation (contaminated cultural landscape/superfund site), Simiinikem (the place where the Clearwater and Snake rivers come together/ Lewiston, Idaho), Tim'neepe (The heart place/ Kamiah, Idaho), Oyayp (where the Nez Perce rescued Lewis and Clark/ Weipe, Idaho), K'useeyne Iskit (expedition trail/ for extended journey/ Lolo Trail, Idaho), Hinmatoom Iniit (El Capitan in the Bitterroot Mountains/ highest point in Nez Perce Country), Islamiisnime (Dolly Varden/Bull trout place/ Missoula, Montana), Weletekeype (where the water looks like a pan/ Livingston, Montana), Tiiweniispe (the fart place/ Yellowstone National Park), Piluciin (gooseberry place/ Crow Indian Reservation).

Slide 19 is an image representing the Nez Perce Tribe, Seasonal Round Calendar showing 17 recognized seasons by cultural food gatherers, hunters, and fishers. This calendar is overlayed with the common calendar months and the 4 seasons (Spring, Summer, Fall, and Winter) to demonstrate contrasting perspectives. The Nez Perce, among other plateau tribes, had to know the seasonal availability of many foods. The availability of foods indicated when to move camp to the next gathering site or to begin gathering the next food in season.

Today, cultural food gatherers, fishers, and hunters express experiencing earlier seasons, shorter gathering windows, and less quality and quantity of foods. For the Nimiipuu, the seasonal round is everything for cultural survival. The foods are unable to adapt quickly enough to the changing climate, risking endangerment and even worse, extinction. This loss is not only to their foods and diverse ecosystems, but loss of culture, loss of language, and the loss of what makes their people Nimiipuu.

All 5 elements go hand in hand: not one without the other (spirit, air, fire, land, and water).



Resources to Review

Review the resources for the Climate Change section:

Video(s):

- Facing Climate Change: Plateau Tribes: https://vimeo.com/36951241
- Roots of Tradition: http://vimeo.com/183056539

Article (Poster): Building a Collaborative Tribal Climate Adaptation Program PA41F-1167 via the Integration of Cultural Values and Perspectives:

https://www.essoar.org/doi/pdf/10.1002/essoar.10501476.1

After reviewing the climate change section, flooding, wildfires, and disease will be introduced. Review each of the section introductions, then assign students one of the remaining three hazard to investigate (watch video and read article). After time exploring the content, ask students to provide a synopsis and insight:

- 6. Summary of the video(s)
- 7. Summary of the article(s)
- 8. Descriptions of the historical contexts of climate change with examples/quotes
- 9. Description of the modern context of climate change (examples/quotes)
- 10. Examples for each of the elements spirit, air, fire, land, and water

Floods (SLIDE 21)

Floods occur naturally and can happen almost anywhere. They may not even be near a body of water, although river and coastal flooding are two of the most common types. Heavy rains, poor drainage, and even nearby construction projects can cause risk for flood damage... Floods are

unpredictable. Because flood risk is always changing, communities have used tools to understand their risk and take actions to protect their families, homes and today, businesses.

Historic floods have left scars across the Nimiipuu homelands. Today, modern floods threaten towns, ravage aquatic spawning habitats, and happen infrequently. The historic stories tell of massive, regional floods from the Ice Age where connection to the elements guided the preparation of the Nimiipuu. Their experiences today wield stories of emergency preparation and response in partnership with local, regional, and federal agencies.

Watch the <u>Idaho Public Television film "The Floods" (https://www.pbs.org/video/floods-hp8otm/)</u> as an introduction to the Missoula Floods, which occurred 13,000 – 15,00 years ago across the homelands of the Nimiipuu. Recall that the Nimiipuu have been archaeologically dated back at least 16,000 years (Science, 2019), thus their presence during the floods and the stories of the floods are congruent.

Additionally, read the partial abstract from Gail Woodside's 2008 Thesis, "Comparing Native Oral History and Scientific Research to Produce Historical Evidence of native Occupation During and After the Missoula Floods".

"The Missoula Floods occurred approximately fifteen thousand to thirteen thousand years ago during the last ice age. The floods occurred when waters held back by a finger of the Purcell Ice Lobe gave way allowing water which covered present day Missoula, Montana to inundate areas of Idaho, Washington, and Oregon. The flooding moved mass amounts of silt and aggregates on its way to the sea. The flooding also carved out and deepened the Columbia Gorge and caused slack water areas or temporary lakes to form when narrow channels backed up the flooding currents.

Native American oral history tells about the flooding and the deep formation of the Columbia River, though some scientists feel that human occupation of the areas ravaged by the floods had not taken place. Native historians hold information regarding Tribal occupation of the areas flooded as well as information regarding survivability by noting techniques of survival and as well as significant peaks used as resting places until flood water subsided. Anthropological dating of the ancient Native people does point to human occupation of these lands with findings of human feces in caves found in Oregon dating approximately fifteen thousand years ago, although occupation by current tribes may not have occurred until later."

The remaining content for floods begins on the next page and should be provided separately for students to review individually or in groups.

Student Content: Floods

"Since the arrival of Christopher Columbus indigenous people of the New World have lost their voice and place in historical believability.

'One of the supposed characteristics of primitive peoples was that we could not use our minds or intellects. We could not invent things, we could not create institutions or history, we could not imagine, we could not produce anything of value, we did not know how to use land and other resources from the natural world, we did not practice the 'arts' of civilization...we disqualified ourselves, not just from civilization but from humanity itself (Smith 2006).'" (Woodside, 2008)

"In a book written by Linda Smith called "Decolonizing Methodologies, Research and Indigenous Peoples," Smith states that native people are now branching out to validate history by first making claim or reclaiming. This includes re-establishing legitimacy to existence and historical knowledge. She also states that testimonials and oral histories become an integral part of research when paired with other stories or other fact makes a complete historical notation of existence. This also gives validation to the knowledge being presented, the sharing and rewriting of the history and the connecting of that history with geologic events and timelines, therefore disqualifying some western thought on the historical fact of the nations it represents." (Woodside, 2008)

Research conducted by Woodside, revealed "The Nez Perce refer to the entity of Coyote who is involved in many of the oral histories described in the abstract. Coyote (Woodside 2008) is akin to a teacher, creator, or trickster depending on your belief systems... Long ago there was a lake located in northeastern Washington and Coyote dug a river from the lake to the ocean so the salmon could migrate (Smith 2005) up the river to feed the people. While digging (*out*) the river Coyote dug a tunnel through the Cascade Range creating a bridge over the river known as Bridge of the Gods. The lake drained down the river, after it was dug. Years later an earthquake collapsed the Bridge of the Gods into the river.

This brief summary of the oral history of the Nez Perce describe the draining of the glacial lake (probably Lake Columbia) which formed near glacial Lake Missoula and spilled its contents concurrently. The earthquake which caused the Bridge of the Gods to tumble into the Columbia River is recorded in geologic time and created a subsequent landslide near present day Bonneville (*Bonneville Dam.*) The quake also helped shape the Cascades (a water formation) on the Columbia River. The incident of the tumbling of Bridge of the Gods is a more recent memory dated somewhere around 900 years ago. The summary of the oral tradition does give specific information regarding the emptying of glacial lake flooding through the Columbia River Gorge, and as stated describes the earthquake which occurred years later." (Woodside, 2008)

Another story shared by the Nez Perce Tribe Cultural Resources (2021) describes:

"A long time ago there was a major flood all over the land. Only the highest promontories were safely above the water like Laliik (Rattlesnake Mountain near Richland, Washington), Ye'iimestes (Steptoe Butte near Colfax, Washington). Many animal people sought solace from the rising flood waters at these places. The waters rose at such a rate that ocean

animals were found to be in places where they could not go before. Five whales were among the ocean dwelling creatures, and they were swimming inland, having a contest to see who could make it the farthest. Iceyeeye, the Coyote, could see them swimming along and he noticed the waters were receding. Iceyeeye gave them a warning do not play here too long, the water is starting to drop, and you will be stuck here if you do not turn around. The whales were having too much fun splashing one another and seeing places they could not go before to listen to Coyote. Coyote told them a second time as the waters really started to drop, "You're going to make a lesson out of yourselves." urged Coyote. The youngest whale pleaded with its four siblings to turn around just as the water dropped: permanently marooning them on the land near Palouse Falls."

This story conveys a few noteworthy points. One is that it is a reminder of the importance of listening to guidance when conditions are growing in urgency. It is elder kinfolk who carry the knowledge of what to do in times of challenge. It is an important part of individuation to learn to act upon guidance of elder kinfolk who are more knowledgeable of potentially dangerous conditions. One must be aware of when responsibility beckons attention away from entertaining diversions for the sake of survival. This story is also a mnemonic to a time when flood waters consumed the land to an extent that places like Steptoe Butte and Rattlesnake Mountain were places of refuge from quickly encroaching floodwaters.

These historic references to ancient-old floods project the relationship of the Nimiipuu to floods. Floods have been revered for their power, strength, also validating Coyote's knowledge and lessons. These natural events, although often considered cataclysmic, have legacies still alive today on their homelands. The lessons of Coyote still reverberate through the prairies and canyonlands, along our waterways and over mountains where we can see, hear, and experience the places through all of the elements (spirit, air, fire, land, water). These events created sacred places on the landscape, which are included in other Nimiipuu legends, and also engaged with and honored by the Nimiipuu prior to colonization. There have been sacred places related to flooding in other ways as well, particularly dams.

With the cataclysmic events created by ice dams, the Nimiipuu also recognize the importance of their relative – taxcpol (beaver) – and his dams. They also live with the repercussions of manmade dams built in the last hundred years. The sacred landscape that gives existence to the Nimiipuu has been altered in disruptive ways of tamálwit (natural law). With colonization and the altered landscape, the Nimiipuu were considerably disconnected from their homelands and the teachings of tamálwit. This transition has required the Nimiipuu to remain adaptive to the relatively novel problems. Modern techniques and tools are being used to monitor their homelands and prepare adaptations to protect their communities (including plant/animal relatives, the living landscape).

The Nez Perce Tribe developed the Natural Hazard Mitigation Plan (2018) "...for the protection of life, property, economic and environmental resources throughout the Reservation. Seeking to inform and educate citizens, provide training and resource coordination and ultimately reduce the vulnerability of Tribal citizens through comprehensive disaster planning and mitigation.

'Hazard mitigation is sustained action to reduce or eliminate the long-term risk to human life and property from hazards. Natural hazard mitigation planning is a process used by state, tribal, and local governments to engage stakeholders, identify hazards and vulnerabilities, develop a long-term strategy to reduce risk and future losses, and implement the plan, taking advantage of a wide range of resources. A state mitigation plan demonstrates commitment to reduce risks from natural hazards and serves as a guide for decision makers for reducing the effects of natural hazards as resources are committed'."

The Nez Perce Tribe Natural Hazard Mitigation Plan (2018) includes a Flood Hazard Profile for the reservation:

"Floods can be divided into two major categories on the Reservation: river and flash flood. River flooding is associated with a river's watershed, which is the natural drainage basin that conveys water runoff from rain and snowmelt. River flooding occurs when the flow of runoff is greater than the carrying capacities of the natural drainage systems... Flash floods are much more dangerous and flow much faster than river floods. Flash floods are caused by the introduction of a large amount of water into a limited geographic extent (e.g. extreme precipitation events in watersheds less than 50 square miles)... This type of flood poses more significant safety risks than river floods because of the rapid onset, the high-water velocity, the potential for channel scour, and the debris load...

The major source of flood waters on the Reservation is normal spring snow melt. As spring melt is a "natural" condition; the stream channel is defined by the features established during the average spring high flow (bank-full width). Small flow peaks exceeding this level and the stream's occupation of the floodplain are common events. The magnitude of most floods on the Reservation depends on the particular combinations of intensity and duration of rainfall, preexisting soil conditions, area of a basin, elevation of the rain or snow level, and the amount of snowpack. Man-made changes to a basin also can affect the size of floods. Although floods can happen at any time during the year, there are typical seasonal patterns for flooding based on a variety of natural processes that cause floods:

- Heavy rainfall on wet or frozen ground, before a snowpack has accumulated, typically cause fall and early winter floods
- Rainfall combined with melting of the low elevation snow pack typically cause winter and early spring floods
- Late spring floods result primarily from melting of the snow pack

... Flooding from ice or debris jams is a relatively common phenomenon in central Idaho and can be a significant contributor to flood-related damages. Small jams frequently occur in many of the streams throughout the Nez Perce Reservation, particularly at bridge abutments and culverts. Dam failures also pose a potential flood hazard. A dam failure is the structural collapse of a dam that releases the water stored in the reservoir behind the dam. A dam failure is usually the result

of the age of the structure, inadequate spillway capacity, or structural damage caused by an earthquake or flood."

In considering the thousands of years of ancestral knowledge of the Nimiipuu homelands and the modern adaptations necessary to maintain their relationship to place, reflect on:

- The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)
- Values of the Nimiipuu
- Examples of Nimiipuu relationships with light, spirit, air, water, and earth
- Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)
- The impact of capitalism, imperialism, and federal law and policy experienced by the Nimiipuu



Resources to Review

Review the resources for the Floods section:

- Watch The Day the Oregon Senate Mourned the Flooding of Celilo Falls:
 http://youtu.be/DQBU0tzqcWQ and read Stories from the Flood: Narratives of Celilo Falls.
 1805 2021:
 - https://scarab.bates.edu/cgi/viewcontent.cgi?article=1404&context=honorstheses
- Watch: PBS Ice Age Mystery of Lake Lewis: https://youtu.be/rWPYaVgxfm8
- Read: Smith, Shane E. 2005. Developing and Presenting Geoscience Interpretive Programs at Nez Perce National Historic Park, Idaho. Journal of Geoscience Education. 53.3 May 2005: 294-296. To link to this article: https://doi.org/10.5408/1089-9995-53.3.294

3 Wildfires (SLIDE 22)

The longstanding relationship of Nimiipuu and fire extends back thousands of years. Many legends contain references to fire, but also include ecological information pertinent to understanding holistically the Nimiipuu homelands.

Read the story and analysis of the traditional ecological knowledge of <u>"How Beaver Stole Fire from the Pines"</u>: <u>https://talkingstories.uoregon.edu/2020/09/10/how-beaver-stole-fire-from-the-pines/</u>

Story

Once, before there were any people in the world, the different animals and trees lived and moved about and talked together just like human beings. At this time the pine-trees had the secret of fire, and guarded it jealously from the rest of the world, so that, no matter how cold it was, nobody could get any fire to warm himself by, unless he was a pine. At length an unusually cold season came, and all the animals were in danger of freezing to death because they could get no fire; but all plans to find out their secret from the pines were in vain, until Beaver hit upon one which proved successful.

At a certain place on Grande Ronde River, in Idaho, the pines were about to hold a great council. They had built a large fire at which to warm themselves, after coming out of the icy water from bathing, and had posted sentinels round about to keep off all the animals and other intruders, who might steal their fire secret.

But Beaver had hidden under the bank near the fire before the sentinels had been posted, and so escaped their notice. After a while, a live coal rolled down the bank close by Beaver, which he seized and hid in his breast, and then ran away as fast as he could. The pines immediately raised the hue and cry, and started after him. Whenever he was hard pressed, Beaver darted from side to side, and dodged his pursuers, and when he had a good start he kept a straight course. Hence the Grande Ronde River is very tortuous in some parts of its course and then straight for some distance, because it preserves the direction Beaver took in his flight.

After running a long time, the pines grew tired and decided to abandon the chase. So most of them halted in a body on the river banks, where they remain in great numbers to this day, and form a growth so dense that hunters can hardly get through it. A few, however, kept on after Beaver, but they finally gave out one after another, and they also remain scattered at intervals along the banks of the river in the places where they stopped.

There was one cedar running with the foremost pines, and although he despaired of capturing Beaver, he said to the few pines still in the chase, "Although we cannot catch Beaver, I will keep on to the top of the hill yonder, and see how far he is ahead." So he ran to the top of the hill, and saw Beaver far ahead, just diving into Big Snake River where the Grande Ronde enters it, so that further pursuit was out of the question. He saw Beaver dart across Big Snake River and give fire to some willows on the opposite bank, and recross farther on and give fire to the birches, and so on to certain other kinds of wood. Since then, all who have wanted fire have got it from these particular woods, because they have fire in them and give it up more readily than other kinds when rubbed together in the ancient way.

Cedar still stands all alone on the very top of the hill where he stopped in the chase after Beaver, near the junction of the Grande Ronde and Big Snake rivers. He is very old; so old that his top is dead, but he still stands as proof of the truth of the story. That the chase was a very long one is

shown by there being no cedars within a hundred miles upstream from where he stands. The old people point him out to the children as they pass by, and say, "See, there is old Cedar standing in the very spot where he stopped chasing Beaver."

Traditional Ecological Knowledge

Zoology - This story contains information about beaver behavior and habitat. It tells us that beavers live along rivers, particularly where willow, birch, and pine grow, and that they hide under river banks. It also identifies two specific rivers (or their tributaries) where beaver can be found - the Grande Ronde and the Snake. Although not explicitly stated, the references to willow, birch, and pine imply that these trees are important to beavers in some way - perhaps for food or for building dams. Because Beaver is sometimes on land and sometimes in the water, the story indicates that beavers are both terrestrial and aquatic. When Cedar sees Beaver dive into the Snake River and cross to the other side, this tells us that beavers are strong swimmers. The description of Beaver's flight suggests that beavers dart from side to side when closely pursued by predators, but travel in a straight line when they have a good lead.

This information is useful for locating, tracking, and hunting beaver. The information about beaver habitat tells hunters where to look for beaver or signs of their presence (such as tracks, dams, or gnawed branches). The information that beavers dart from side to side could be useful for tracking and pursuing them. The information that beavers swim indicates that they can escape a hunter by diving into the water, which suggests that trapping might be a more effective way of catching them than hunting.

Botany - This story identifies four types of wood that ignite readily and are good for making fire: pine, cedar, willow, and birch. It also provides information about the growth habits of pine: these trees can grow in stands so dense that people can barely travel through them, but can also grow in a more scattered formation. The story also references the habitat of these species: pine, willow, and birch grow near rivers, while cedar grows on hilltops. More specifically, the story indicates that pine is found in abundance along the Grande Ronde River, that willow and birch are found on either side of the Grande Ronde at its junction with the Snake, and that there is no cedar for a hundred miles upstream of this junction.

This information is useful for making a friction fire: some types of wood are difficult to ignite using this technique, so knowing what materials to use for a fire drill, tinder, and kindling can mean the difference between life and death. One informant reported using the information in this story for precisely this purpose: "he and some companions were once on a fishing expedition, and had wandered too far from home to return at night. They . . . had no matches with which to start a fire. . . . Fortunately . . . they recalled the different kinds of wood to which Beaver had given fire . . . and which they understood to be . . . preferable as kindling woods. Accordingly, they took pieces of two of the kinds mentioned . . . made a small cavity in one of them, and rapidly turned the pointed end of the other therein until they were able to kindle a fire by friction" (Packard 1891:329). The information the story provides about habitat is useful for locating these woods when they are needed.

Physical Geography - This story notes that the Grande Ronde River empties into the Snake River, and that its course is straight in some places and very winding in others. The story also indicates that the banks of the upper Grande Ronde are densely forested with pine, but more thinly forested downstream. It further notes that there are no cedars along the Grande Ronde within a hundred miles of its junction with the Snake. The story also identifies a landmark – a hill near the junction of the Grande Ronde and Snake, topped by a solitary cedar tree.

This information is useful for route planning and navigation. The comment that the pine forest is "so dense that hunters can hardly get through it" suggests that land travel along this stretch of the river is difficult, making it unsuitable for hunting: dense vegetation makes it difficult to detect, track, and chase game. However, these same features make the area well-suited for eluding or hiding from pursuing enemies. The cedar is a logical choice as a landmark, because it is a long-lived species and easy to see from a distance. Upon viewing it, a traveler would know that the junction of the Grande Ronde and Snake rivers was nearby.

Cultural Geography - This story contains information about social norms: by noting that the pines guarded the secret of fire "jealously," the story implies that it was wrong of them not to share their knowledge with others. This point is reinforced by comments on the suffering caused by the pines' stinginess: "no matter how cold it was, nobody could get any fire to warm himself by ... and all the animals were in danger of freezing to death." The story also delimits part of Nez Perce territory, in the statement that there are "no cedars within a hundred miles upstream from" the cedar landmark. This indicates that the narrator's home range includes at least a hundred miles of the Grande Ronde upstream from the Snake.

Technology - The story notes that certain types of wood ignite "when rubbed together in the ancient way." Although it does not describe how this is done, it nevertheless tells us that fire can be made through the application of friction. Beaver's use of a live coal to "give fire" to various tree species demonstrates an alternative, more efficient means of making fire: igniting tinder using a burning ember takes much less time, energy, and skill than making a friction fire. Beaver's flight demonstrates that carrying live coals while traveling saves the hassle of using the friction method when making camp. The story also warns and explains why it is important to know how to make fire: "an unusually cold season came, and all the animals were in danger of freezing to death because they could get no fire."

"The legends convey moral teaching and practical information about familiar things and deal generally with notable landmarks of the Nez Perce terrain, the storms and winds of the mountains, the rattlesnakes among the basalt rocks in the canyons, the flowing streams and the salmon that come in the spring and summer, the insects, birds, animals, and trees."

-Josephy 2007:1-2)

There is extensive ecological knowledge embedded in the stories of the Nimiipuu. They learn the significance of fire through the stories, observing the plant and animal relatives, and through spiritual messages. Fire is one of the five elements and is considered sacred. Taxcpol (beaver) maintains his responsibility to fire still today.

The remaining content for wildfires begins on the next page and should be provided separately for students to review individually or in groups.

Student Content: Wildfires



Wildfire Connection Considerations

Taxcpol (beaver) maintains his responsibility to fire still today. Read the abstract from <u>Smokey</u> the Beaver: beaver-dammed riparian corridors stay green during wildfire throughout the western United States:

https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/eap.2225

"Beaver dams are gaining popularity as a low-tech, low-cost strategy to build climate resiliency at the landscape scale. They slow and store water that can be accessed by riparian vegetation during dry periods, effectively protecting riparian ecosystems from droughts. Whether or not this protection extends to wildfire has been discussed anecdotally but has not been examined in a scientific context. We used remotely sensed Normalized Difference Vegetation Index (NDVI) data to compare riparian vegetation greenness in areas with and without beaver damming during wildfire. We include data from five large wildfires of varying burn severity and dominant landcover settings in the western United States in our analysis. We found that beaver-dammed riparian corridors are relatively unaffected by wildfire when compared to similar riparian corridors without beaver damming. On average, the decrease in NDVI during fire in areas without beaver is 3.05 times as large as it is in areas with beaver. However, plant greenness rebounded in the year after wildfire regardless of beaver activity. Thus, we conclude that, while beaver activity does not necessarily play a role in riparian vegetation post-fire resilience, it does play a significant role in riparian vegetation fire resistance and refugia creation."

Consider: How does taxcpol demonstrate reciprocity, responsibility, relationship, and respect regarding fire?

The Nimiipuu have utilized fire in various ways over the millenia. The historic uses are not as prominent today, yet they still value fire as sacred.

"Our elders are mostly gone and our land has changed. We no longer use fire in the ways of the past as much because we have learned to adapt. We have gone from fire burners to fire fighters." (Carol et al, 2010)

Read the excerpts from Fire Burners to Firefighters: The Nez Perce and Fire (Carol et al, 2010):

"The posttreaties land base held in trust by the US Government's Bureau of Indian Affairs (BIA) was reduced under the terms of the 1887 Dawes Act... The family allotments and common land holdings were further diminished over time through conversion of allotments from trust status to fee simple and losses to tax defaults. The net result today is a greatly reduced and fragmented land base with the tribe as a minority landowner within its own reservation, controlling 13% of the approximately 770,000 acres within the current reservation boundaries (Colombi 2005). Less than 5% of the reservation land is forested, with about 30,000 ac in tribal forestland and an additional 5,000 ac divided among 140 individual allotments."

"The earliest explorers and settlers described native use of fire in their letters and journals and some of these settlers followed suit and implemented these burning practices on their farms (Stewart 1951, Shinn 1980). Generally, fire was used by tribes to improve production of food and medicinal plants, clear undergrowth to facilitate travel, improve forage production for wildlife and later livestock, and drive game animals (Bancroft 1875 [cited in Stewart 2002], Stewart 1951, Boyd 1999a). Similar practices have also been documented among Pacific Northwest tribes such as the Salish and Kootenai (Barrett and Arno 1982), the Spokan (Boyd 1999b), and the Colville (Spier 1938 [cited in Stewart 2002]). Following the US policy of suppressing forest fires in the wake of the 1910 fires, tribal burning practices were also suppressed during this time (Shinn 1980, Ross 1999), contributing to the increased fuel loads and changing species mix of the western forests and rangelands (Ross 1999)."

"In the Inland Northwest, Shinn (1980) claims that widespread use of broadcast burning can be dated to the Pleistocene, although the varied topography limited the regular use of burning. There are only small kernels of information about fire use by the Nez Perce. Marshall (1999) describes Nez Perce setting fire to Camas fields to improve the yield of this important root as a food source. Walker (1998) mentions the use of fire in entrapping game animals. The use of fire as a means of war against the Snake tribe (traditional enemy of the Nez Perce) is documented by McWhorter (1992)."

"...The evolution of fire use on the Nez Perce reservation is that of a hybridization of knowledge and practices from a traditional culture with those from the now-dominant culture. The story of Nez Perce fire today is one of the blending of traditional knowledge, western science, and technology with the constraints of a people settled on a small portion of the land they once occupied, often in the vicinity of nontribal neighbors... there remains a legacy of fire knowledge and links to spiritual and cultural beliefs among Nez Perce tribal members."

The Nez Perc Tribe developed the Natural Hazard Mitigation Plan (2018) "...for the protection of life, property, economic and environmental resources throughout the Reservation. Seeking to inform and educate citizens, provide training and resource coordination and ultimately reduce the vulnerability of Tribal citizens through comprehensive disaster planning and mitigation.

'Hazard mitigation is sustained action to reduce or eliminate the long-term risk to human life and property from hazards. Natural hazard mitigation planning is a process used by state, tribal, and local governments to engage stakeholders, identify hazards and vulnerabilities, develop a long-term strategy to reduce risk and future losses, and implement the plan, taking advantage of a wide range of resources. A state mitigation plan demonstrates commitment to reduce risks from natural hazards and serves as a guide for decision makers for reducing the effects of natural hazards as resources are committed'."

The Nez Perce Tribe Natural Hazard Mitigation Plan (2018) includes a Wildland Fire Profile for the reservation:

"Historically, most plant communities in the state of Idaho were fire-adapted and regularly burned. Frequent, low intensity fires limited fuel accumulation across the landscape and contributed to the distribution of native, fire-adapted plant communities. In contrast to modern day conditions, fire return intervals (the amount of time between fires in a defined area) were shorter but fires burned with less intensity."

"Historically, the State of Idaho has had very active fire seasons. Long periods of hot and dry weather in summer months exacerbate fire conditions with some years being more extreme than others. In the last decade, the 2012 fire season was the most significant as large fires burned more than 2.5 million acres across the state. However, several years, specifically 2009, were relatively mild and fewer than 250,000 acres burned as a result of large fires. Figure 14 shows the locations and perimeters of large wildfires that occurred in Idaho between 2000 and 2017."

"In 2015 there were a number of large fires in and around the Reservation; the fires included in the Clearwater and Municipal Complex fires burned 68,127 acres in total: the Fisher Fire located south of Orofino burned in the canyons before reaching agricultural lands and burned 18,889 acres, in the Kamiah area the Lawyer 2 Fire consumed 41,195 acres, the Municipal Fire burned 1,770 acres, the Lolo 2 Fire burned 6,200 acres, and the Old Greer Fire burned 73 acres. Because these fires occurred primarily in the wildland urban interface, lives, homes, and property value were threatened. Numerous buildings were destroyed along with millions of board feet of privately owned timber, livestock fences, crops, and other infrastructure. As a secondary effect, there have been and continue to be erosion issues along roadways and in the canyonlands. Figure 17 shows historical fires that have occurred on the Reservation.

Reservation fires in 2007 included the Russell Ridge (Hatwai) Fire at 4,800 acres, Coyote Creek (Grade) Fire near Spaulding at 3,300 acres and the loss of one tribal residence, and the Central Grade Fire at 100 acres. Multiple fires have also occurred in the Craig Mountain area, including the Chimney Creek Complex (51,000 acres) in 2007, Dry Creek (5,700 acres), and the Kurby Fire (550 acres). In 2000 as a result of a large fire season, the Federal government declared several counties, including Clearwater, Idaho, and Lewis, disaster areas.

Local knowledge suggests that Native Americans did frequently perform burns which played an important role in shaping the vegetation throughout the county. During the public meetings, participants shared information about previous fire events. This information is consistent with DOI ignition data for the reservation which suggests that the majority of the ignitions reported on the Reservation from 2007 to 2017 were human caused (265) and that natural ignition sources (lighting strikes) were less common (96)"

"Lightning ignitions are common on the Reservation and typically occur along ridgetops, but negligence and arson, as well other human causes, account for the majority of ignitions that occur on the Reservation. These fires are often quickly controlled by local resources and rarely grow beyond an acre in size. Larger fires, requiring additional resources beyond initial attack, are less common, but can occur annually. Based on past history, this type of fire is likely to occur on and/or near the Reservation approximately every 3 years."

"In the event that a wildfire exhibits extreme behavior, it may be necessary for some communities to evacuate. The evacuation of densely populated areas will require extensive traffic control, safe routes that are capable of accommodating high traffic volumes, and additional resources and facilities will be required should evacuees need emergency shelter in the event that they do not have alternate lodging options. Accommodations for evacuees will place additional demand on community

resources and may further disrupt neighboring communities. Local businesses could be affected in several ways, particularly if access to business districts are limited or restricted altogether. In addition to heavy smoke, closures of natural or recreational areas may also have adverse impacts on the tourist industry.

Wildland fires, big and small, are dangerous to both Tribal residents and emergency response personnel. Wildland fire suppression activities have a very high frequency of injuries, such as heat exhaustion and smoke inhalation, and have caused numerous deaths nationwide. Fire events often result in a multi-department and agency response effort; thus, coordinating activities and ensuring everyone's safety is paramount.

The Reservation has sensitive populations such as elders and children, who may be affected by air quality during a wildland fire. Smoke and particulates can severely degrade air quality, triggering health problems. In areas heavily impacted by smoke, people with breathing 62 problems might need additional services from doctors, emergency rooms, or the need to find locations with clean air."

"In addition, climate change is expected to increase annual summer temperatures up to 7.5 degrees Fahrenheit by mid-century, and up to 12.1 degrees Fahrenheit by the end of the century, lengthen the wildfire season, increase the annual days of extreme fire danger, and decrease summer soil moisture resulting in drier, hotter, more vulnerable forests, and more extreme fire danger. With an increase in average annual summer temperature, it is also likely that the region will experience a greater number of extreme fire danger days; this is also reflected in the projected annual heat accumulation over 50 degrees Fahrenheit which is also expected to increase through 2099."

"Climate change will also affect seasonal soil moisture levels which are expected to steadily decline. Compared to a historic value of 23.9 inches, average soil moisture levels for July through September are expected to drop to 20.8 inches by 2069, a 13% decrease. Soil moisture levels are projected to continue to decrease, averaging less than 20 inches per year by 2099"

In considering the thousands of years of ancestral knowledge of the Nimiipuu homelands and the modern adaptations necessary to maintain their relationship to place, reflect on:

- The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)
- Values of the Nimiipuu
- Examples of Nimiipuu relationships with light, spirit, air, water, and earth
- Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)
- The impact of capitalism, imperialism, and federal law and policy experienced by the Nimiipuu



Resources to Review

Review the resources for the Floods section:

Videos:

- Fire Management of American Indian Basket Weaving Plants in the Pacific Northwest: http://youtu.be/eiUqePAA2dY
- <u>'It really was a firestorm': How Idaho's 'Big Burn' fire of 1910 shaped the way wildfires are fought: https://youtu.be/nPQ_lgBV3rY</u>
- Find out what's happening to Idaho's wildfire season.: https://youtu.be/zTouTszCmhU

Articles:

- Carroll, M. S., Cohn, P. J., Paveglio, T. B., Drader, D. R., & Jakes, P. J. (2010). Fire burners to firefighters: the Nez Perce and fire. *Journal of Forestry*, 108(2), 71-76. To link to this article:
 - http://static1.squarespace.com/static/545a90ede4b026480c02c5c7/t/55aed700e4b0493eb21efbae/1437521664519/Carol.etal.2010.FireBurnersToFightersNezPerce.JA.pdf
- Dixon, R. A., Eitel, K., & Zhu, Y. (2019). Developing STEM Identity of Nez Perce Students: Identifying Entry-Level Competencies for Forestry and Fire Management. *Journal of Research in Technical Careers*, 3 (1). https://doi.org/10.9741/2578-2118.1045
- Drader, D. R. L. (2009). Nez Perce Perspectives on Fire Management and Program
 Accessibility (Doctoral dissertation, Washington State University). To link to this article:
 http://www.dissertations.wsu.edu/Thesis/Summer2009/D_Drader_081009.pdf

Disease (SLIDE 23)

Diseases and pandemics have plagued the Nimiipuu and their homelands since the time of colonization. Oral traditions and legends do not expound upon any instances prior to contact; The historical context of epidemics does not extend past 300 years.

Bighorn sheep, a sacred relative of the Nimiipuu historically was the most abundant ungulate species of the Nimiipuu canyonlands (Clearwater, Salmon, and Snake river systems.

"Archaeological evidence and reports by early explorers indicate that bighorn sheep were widely distributed and abundant in Idaho until the late 1800s. As occurred throughout the West, drastic population declines followed the arrival of homesteaders and other settlers in the late 1800s and early 1900s. Declines were caused by a combination of unregulated hunting, competition with livestock for forage, and disease. By 1920, the Idaho bighorn sheep population was estimated at 1,000 animals, mostly within the Salmon River watershed. As a result of restoration efforts, including strict hunting regulations, habitat protection, and translocations of bighorn sheep to historically occupied habitat, by 1990 numbers increased to about 5,000. However, starting in the late 1980s and continuing through the 1990s, population declines, primarily associated with disease, reduced statewide numbers to an estimated 2,900 bighorn sheep today." (Idaho Fish and Game, 2010).

The animal relatives and Nimiipuu have both detrimentally been impacted by disease.

"The 1781-82 epidemic undoubtedly decimated Nez Perce villages, stripped the people of some of their headmen and prominent leaders, undermined and weakened their societies, and for the time demoralized the survivors. Some anthropologists maintain that in reaction a temporary 'prophet cult,' centering around one or more religious leaders who announced prophecies received in visions, swept through the Plateau. Such a cult, it is asserted, was not only a response to the traumatic shock of their populations losses but reflected also a conflicting combination of their anxiety over the approaching white men, who had introduced the disease and had many other great powers, as well as of their desire to meet the white because they would be bringing with them many wonderous gifts. Evidence of such a transient cult among the Nez Perce at this time is scanty and subject to controversy, however event though archaeological findings of abrupt changes in Nez Perce burial patterns and habits in the eighteenth century and a possible preoccupation with death among Plateau peoples have been advance to support its existence." (Josephy, 2007)

The remaining content for disease begins on the next page and should be provided separately for students to review individually or in groups.

Student Content: Disease

"The first non-Indians to meet them [Nimiipuu], Meriwether Lewis and William Clark's Corps of Discovery, estimated their population at between four and six thousand in 1805, arriving in the region after two smallpox epidemics had already ravaged the area since 1774. Fur traders, missionaries, and miners subsequently continued to expose Native people to numerous other contagious diseases. By 1890, Agent Warren Robbins calculated the Nez Perce population at 1,715 — less than half Lewis and Clark's low estimate." (James, 2011)

"A series of smallpox epidemics, beginning in the 1780s and continuing through the 1850s, wrought disaster upon the [Nimiipuu] and all the Indian tribes of the region. There were no natural immunities to ward off these diseases. Besides smallpox, which was the most serious of the diseases, measles, scarlet fever, chickenpox and whooping cough took their toll. Spreading from the east with returning buffalo hunters and from the west up the Columbia River from white sea traders, entire [Nimiipuu] families, camps and villages were wiped out...

Not only was there a tremendous loss of life, estimated to be up to half the entire [Nimiipuu] population, but with the death of elders came a loss in ceremonial and subsistence knowledge necessary to successfully journey the seasonal round, and with the death of infants came a generation that was not to be. One can not imagine the cries of grief coming from the grandmothers!

...What occurred for the [Nimiipuu] occurred throughout the region. As a direct result of the epidemics that swept over the entire of the Columbia River Plateau region, of the over 100,000 inhabitants that populated the area prior to the introduction of the various diseases, by 1890 the Indian population was estimated to be only 17,000!" (Nez Perce Tribe, 2002)

Anawhooee [Black Bear], a Wasco (neighboring tribe of the Nimiipuu) told the story in 1911:

"A small girl, I was with my parents and others in a canoe coming up the Che Wana [Big River] not far from this side where Portland stands. A little girl of about twelve snows appeared on the bank and called to be taken with us. She said, 'I am alone. Everybody dead but me! Take me with you! I do not want staying here with the mamaloos [dead]!'

But my parents and friends were afraid to take her on the canoe. Afraid of whatever had killed all in that village. Might bring death to our own village. That little, lonely child was left crying on the Wana's bank. I can never forget seeing her. Cannot forget her piteous crying. I was but a small child myself, but the remembrance of it never left me.

There were many such cases along the Che Wana. Nobody knew what the sickness. The medicine men were helpless to drive the death trouble away. It was a white man's disease, brought by them, and then they took from us our lands." (McWhorter, 1952)

This narrative expresses both the compassion for the young girl's dire situation and the helplessness to deal with it. It also conveys that Wasco people knew the importance of social distancing and isolation as a prescriptive safety response to pandemic situations. The parents and other adults in

the boat knew the risk of the choice to bring the young girl on board the canoe and chose to social distance for the sake of safety.

"Unlike smallpox and other old world viruses, tuberculosis bacilli existed in the western hemisphere before European contact. Still, the incidence of tuberculosis in the Americas before the arrival of Christopher Columbus was not severe. Circumstances of European and Native relations, however, exponentially amplified its occurrence and virulence. During the assimilation era, overcrowded conditions in boarding schools and the static nature of reservation life helped raise tuberculosis to epidemic proportions. It posed the same threat to American Indians during the 1890s as smallpox and other viruses had during previous decades and centuries.

While these diseases threatened the physical survival of Native people, the assimilation campaign simultaneously attempted to erase cultures, traditions, and behaviors that survivors of earlier pandemics had maintained, nurtured, and sometimes modified. The Dawes General Allotment Act of 1887, in particular, infamously attempted to destroy Indian communal values in favor of individual farm work in the market economy. Off-reservation boarding schools sought to educate Indian children in Euro-American domestic arts, agriculture, and mechanics while purging them of as much of their indigenous language and culture as possible. The era's "Vanishing Indian" prediction — the concept that Native Americans would not survive long into the twentieth century — reflected both physical death caused by contagions and cultural death caused by assimilation policies." (James, 2011)

"The prevalence of tuberculosis coincided with the assimilation campaign in federal Indian policy. Widely acknowledged as a misguided and flawed policy at best, and ultimately as a failure, assimilation policy sought to convert American Indians to Euro-American culture — materially, mentally, and spiritually. Its negative results included increased poverty, land alienation, and language loss. Assimilation and combat of tuberculosis crossed paths at several points. Non-Indian observers, for example, often believed lack of assimilation helped explain the high rate of tuberculosis in Native communities, thus justifying the direction and goal of the policy. The Nez Perce reservation in Idaho provides an example of the intersections of Indian health issues with government policy. Because the fight against tuberculosis at Fort Lapwai sanitarium school, established in 1909, reflected and reinforced assimilation goals, policy and health-care efforts fashioned a deadly paradox: the same individuals who dedicated themselves to saving Nez Perce people actually contributed to one of the gravest epidemics in American health history.

Physician John N. Alley, working on the Nez Perce reservation in 1910, conveyed in his annual report some shocking statistics to North Idaho Indian Agency Superintendent Oscar H. Lipps: 'At least seventy-five percent of the Nez Perce Indians have tuberculosis in some form," he wrote; "hardly a family . . . is free from the disease.' The agent in turn relayed this somber news to the Commissioner of Indian Affairs, adding 'a great many families' lost from two to as many as twelve children to the white plague. Similar reports from other reservation communities were common during the early twentieth century, but the Nez Perce seem to have experienced an exceptionally high incidence of tuberculosis. Because of the disease's long degenerative impact, young adults fell victim to tuberculosis most frequently, having originally contracted it at a younger age. These individuals were

in the prime of life and represented the next generation of leadership, and their loss created a break in the tribe's generational continuity. Cultural survival therefore faced threats from both assimilation and tuberculosis. (James, 2011, p. 144 - 145)

The impact of disease is largely documented in these ways – the explanations of the decimated populations of Nimiipuu and other Plateau people. What is less documented is the resilience of those who survive the epidemics.

"smallpox festered along the Columbia with dinner internecine effect where the slaughter it was heaviest and quickest, there was no time for proper grave making, so trenches were dug. The dead were buried in long rows and rocks were heaped atop the shallow graves to outwit the sharp clawed coyotes, hungering for a scandalous feast.

The Dreamer, the two close friends, and less than half the villagers survived.

A variety of low-growing sunflower, the balsam, whose tender roots were used as food, grew at Priest Rapids and was used to treat the disease. It was called *chaluk*. The roots were cut into small pieces and brewed to make a tea. Another plant, *kutkut*, small and thick-leaved that grew near Soap Lake, was used as a poultice to treat smallpox causes. Park Hyatt contracted smallpox, but he was treated by small Walla and survived." (Relander, 1956)

Plants, animals, sacred places, and ceremonial knowledge have sustained the Nimiipuu despite the diseases imposed upon through settler colonialism. There are implications today based on the resilience and values of the Nimiipuu.

Read excerpts from the article, <u>Through the ages</u>, <u>contagions 'impacted everybody'</u>: <u>https://lmtribune.com/coronavirus/through-the-ages-contagions-impacted-everybody/article 9d04119a-81f4-11ea-9607-afb79b222d73.html</u>

"... [Nez Perce Tribe Cultural Resources Director, Nakia] Williamson said the diseases and other things introduced by Europeans, such as the horse, firearms and waves of settlers, brought unprecedented changes to the tribe's way of life. It was something foretold in their belief system.

'A lot of that is connected to what our people would call the 'big change' that was coming to this land that we were going to be subjected to, and this way of life was going to be given to us to help us navigate cataclysmic change that was going to come not only to us but to the environment and the land itself — and that change isn't done yet," he said. "There are still other changes that could potentially happen that would go along with that, changes to the land, changes to the environment and disease.'

Native people tend to be reflective at times of great change, he said, and look both inward and outward for causation.

'We always see ourselves as being part of the environment as native people, but there is a responsibility that happens. Our wise people of the past tell us it's a time to reflect on our own

actions as a society and people, all of us, a time to reflect on how we are living our lives, how we are treating one another and how we are treating the Earth.'

Those of us who try to maintain that understanding brought down and passed to us by knowledgeable elders find ourselves in the same contemplative mood at this time.'

A connection between the way people treat and use the land and large-scale epidemics is something increasingly accepted by modern science. Both human-caused climate change and human encroachment on and alteration of wildlife habitat plays a role in the spillover of disease from one species to another.

Both force wildlife, people and their livestock to move and overlap, which increases the chance of diseases, especially those caused by quickly mutating viruses, to spill over from one species to another.

Williamson sees what may be a lesson in this current [COVID-19] outbreak, one that traces back to that first outbreak of European disease that affected his people more than two centuries ago. Even then, when it took many months instead of just hours to cross oceans and continents, people were connected and shared vulnerabilities. Today, with the global population exponentially larger and people more mobile than ever, the connections and vulnerabilities are stronger. So too is the potential for cooperation and understanding.

'Now, more than ever, we realize that we rely on one another and that what happens to other people affects all of us,' he said. 'If nothing else, this may be a way to bring people back together rather than separate them. It's not just a geographic area or a certain group of people; it's everybody being impacted. If anything good comes out of reflection on our shared humanity, I think that is the potential here, because it's impacting everybody."

With the COVID-19 pandemic prevalent in Nimiipuu homelands and community, there have been multiple avenues in addressing the problem. Reflecting on the past pandemics and continuing to value Nimiipuu culture and traditions, the Nimiipuu have actively addressed the COVID-19 pandemic systematically on the Nez Perce Indian Reservation, but also across their homelands in Idaho, Washington state, and Oregon.

On March 5, 2020 the Nez Perce Tribe COVID-19 Task Force announced that there were no confirmed cases in Idaho. Despite the efforts (i.e. the Nez Perce Tribe Stay-At-Home order), on May 1, 2020 Nimiipuu Health (the Indian Health Services providing healthcare to Nimiipuu and local community) announced the first positive tests of the novel coronavirus. Prior to Nimiipuu community exposure, there was ample planning through the Emergency Operations Command, communication specific for the community (including live updates via social media from the Nez Perce Tribe Executive Committee Chairman, Incident Commander, and Nimiipuu Health Medical Director), webinar and online resources distributed, and guidelines set and implemented. Review the Nez Perce Tribe COVID-19 Updates: https://nezperce.org/wp-content/uploads/2021/05/NPT-COVID-19-Update-Log.pdf (posted chronologically with the most recent on top).

Support for the community was allocated at various times throughout the pandemic, including financial support, organized subsistence hunts, and food/supply distributions (including cleaning/disinfecting supplies and laptops/tablets for youth). As a sovereign government, the Nez Perce Tribe has taken actions in preparation and adaptation. As a community, countless acts of leadership, protection, and healing have been demonstrated.

The same plants, animals, sacred places, and ceremonial knowledge that sustained the Nimiipuu was deployed to address the COVID-19 pandemic. Preparation, a longstanding value that is emphasized in numerous legends, is prevalent today. Plant medicines had been stockpiled by those who have the knowledge and connection to the relatives; Hunters and fishers were safely organized and supported to harvest animal relatives (buffalo, salmon); and sacred places and ceremonies continued with adaptations to follow COVID-19 protocols as directed by the Nez Perce Tribe Emergency Operations Command. The community continues to rely upon the old ways, the old medicines, the old foods, songs, and prayers for protection and healing through the pandemic. To rely upon ancient old – thousands of years old - practice and knowledge, in tandem with modern protocols and practices, the Nimiipuu community has kept themselves relatively isolated, although not completely clear from COVID-19 deaths.

As of June 25, 2021 Nimiipuu Health administered 2,836 vaccines to tribal citizens and the greater community. The Nez Perce Tribe is currently following the protocol of Stage 4 of the Idaho Rebounds guidelines. This permits gatherings of more than 50 people, with proper protocols in place. Non-essential travel can continue to locations that allow. The Tribe has adapted the Idaho Rebounds guidelines throughout the pandemic with specific notice to the needs for protection and healing that the Nimiipuu require. Every loss in the community is significant, every life is sacred. As previously described, the ways in which cultural protocols are followed during times of pandemics/epidemics are adapted as needed. The Nimiipuu honor the ways of their culture and recognize the need to remain adaptive for their existence to persist.

The impact of the pandemic has largely been experienced physically, emotionally, economically, environmentally, and spiritually by the Nimiipuu. There is not concern as to what has happened as "good or bad" but instead, seek to understand the balance of tamálwit, Natural Law.

In considering the thousands of years of ancestral knowledge of the Nimiipuu homelands and the modern adaptations necessary to maintain their relationship to place, reflect on:

- The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)
- Values of the Nimiipuu
- Examples of Nimiipuu relationships with light, spirit, air, water, and earth
- Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)

 The impact of capitalism, imperialism, and federal law and policy experienced by the Nimiipuu



Resources to Review

Review the resources for the Floods section:

Videos:

Search Google videos for "Nez Perce Tribe COVID" and watch one of the COVID-19 updates from Dr. Hartwig.

Articles:

Visit the <u>Nimiipuu Health Coronavirus Response website</u> and read the most up-to-date content. Link to website: <u>https://nimiipuu-coronavirus-response-nptgisonline.hub.arcgis.com/</u>

Read Disease and Demography in the Plateau:

https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1155&context=anth_fac

Read Disease Epidemics among Indians, 1770s-1850s:

https://www.oregonencyclopedia.org/articles/disease epidemics 1770s-1850s/#.YN5jFeh1CUk



HOLISTIC UNDERSTANDINGS (SLIDE 23)

"Tamálwit is the law that binds us to and makes us accountable to this land" – Nakia Williamson, Nez Perce, 2018.

In considering climate change, floods, wildfires, and disease, the Nimiipuu have held their sacred relationship to their culture and homelands for thousands of years. As a form of emergency management, preparation and adaptation have been vital to the success of the Nimiipuu resilience.

Task: Assigned as homework, students write a reflection on the role of FEMA and/or agency representatives in honoring Nimiipuu values, relationships, balance and responsibility in preparation and adaptation to hazards.

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Appendix A. Cornell Notes Template

Video Title:	Scholar Name:
	Date:
	Notes/Definitions/
Themes	Examples/Sentences
The homelands of the Nimiipuu (including the landscape, climate, specific/sacred places)	
Values of the Nimiipuu	
Examples of Nimiipuu relationships with light, spirit, air, water, and earth	
Forms of colonization experienced by the Nimiipuu (Reference Module 1 -3)	
The impact of capitalism, imperialism, and federal law and policy experienced by the Nimiipuu	
Write a paragraph summary of the video focus	sing on the themes:

Module #6 Resilience: Nimiipuu (Nez Perce)

The Nimiipuu (Nez Perce people) embody resilience in their continued existence that extends back tens of thousands of years and is still prevalent today. Resilience has been possible by the multifaceted, land-based, culturally founded, holistic approach that is often identified as sustainable practices. Like Module 4 and Module 5 described, the Nimiipuu perspective on sustainability is better described with resilience and respect, relationship, reciprocity, and responsibility.

Modules 6 discusses the longstanding practices of Nimiipuu resilience.

Learning Outcomes:

- Gain appreciation for the longstanding practices of Nimiipuu resilience.
- Identify relationships of the elements with systemic issues and cultural competency, food sovereignty and security, and education.
- Consider the role of FEMA and/or agency representatives in supporting Nimiipuu resilience.

Outline:

- Exploration Activity: An activity assigned at the beginning of the module where students
 listen to a podcast of Nimiipuu and take detailed notes addressing themes resilience and
 sustainability.
- Opening Discussion: A two-part activity for students to develop a list of conflicts, barriers, and atrocities Nimiipuu have endured; and describe how resilience is demonstrated in the Battle of Big Hole experience that was shared.
- Module Content: Informational content offers insight of the longstanding practices of Nimiipuu resilience including formal initiatives in climate, COVID-19, food sovereignty/security, and education.
- Holistic Understandings: Assigned as homework, students write a reflection on the role of FEMA and/or agency representatives in honoring Nimiipuu resilience.



EXPLORATION ACTIVITY (SLIDES 4 - 5)

Nimiipuu resilience is prevalent in the stories of place and culture, the lessons of the land, and the lived experiences of the past, present, and into the future.

Two family members, Emily Washines (Yakama) and Josiah Pinkham (Nez Perce), discuss finding resilience, comfort, and strength in times of challenge.

Emily Washines is an enrolled Yakama Nation tribal member with Cree and Skokomish lineage. A scholar, with a Master's in Public Administration, her work is in film, writing, speaking, exhibits. Her blog, Native Friends, focuses on history, culture, and building understanding and support for Native Americans. Her research topics include the Yakama War, Native women, traditional knowledge, resource management, fishing rights, and food sovereignty. She has been focusing much attention on researching and speaking on the historical aspects of missing and murdered Native women on the Yakama reservation, with particular emphasis on women and girls who were raped and murdered in the years leading up to the Yakama War of 1855-58. Emily speaks Ichiskiin (Yakama language) and other Native languages. Yakima Herald-Republic lists her as Top 39 under 39. She received a Single Impact Event Award for her 2018 presentation from the Association of King County Historical Organizations. She is a board member of the Museum of Culture and Environment, Artist Trust, and Columbia Riverkeeper. She is adjunct faculty at Yakima Valley College. She lives on the Yakama reservation with her husband and three children.

Josiah Blackeagle Pinkham was raised on the Nez Perce Indian Reservation in north-central Idaho and has worked in the cultural resource field for over 20 years as a Nez Perce Tribal Intern, Tribal Traditions Technician, Ethnographer, and a Cultural Specialist. He has also worked on a variety of cultural resource workgroups with several federal, state, and county agencies, as well as private corporations and other tribes. While he believes his knowledge comes from the elders and the Nez Perce landscape he is also a graduate of Lewis-Clark State College with an interdisciplinary honors degree in Native American studies and psychology. Mr. Pinkham regularly speaks to public schools, college classes and the public. He has travelled nationwide and has also travelled overseas for interpretative talks and cultural exchanges.

Directions: Students listen to the podcast *Voices of Family in Land and Sky*. This podcast should be reviewed before class and Cornell Notes (Appendix A) while considering:

- Descriptions of the resilience of Nimiipuu with examples/quotes
- Examples of Nimiipuu relationships with spirit, air, fire, and land.
- Summary of the podcast.

Resource List:

Podcast: Voices of Family in Land and Sky

Find the Cornell Notes Template in Appendix A.

OPENING DISCUSSION (SLIDES 6 - 7)

Nimiipuu resilience is apparent today in the people and the homelands.

Merriam-Webster defines resilience as "1: the capability of a strained body to recover its size and shape after deformation caused especially by compressive stress; 2: an ability to recover from or adjust easily to misfortune or change".

The definition of sustainable is "1: capable of being sustained; 2a: of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged; 2b: of or relating to a lifestyle involving the use of sustainable methods".

There are not formal definitions of resilience or sustainability from a Nimiipuu perspective, because definitions can be limiting. The act of resilience in sustaining livelihood, culture and relationship to place is demonstrated when considering the many initiatives enacted upon the Nimiipuu through colonization.



OPENING DISCUSSION

Considering content from Module 1 – 3, ask students to provide a list of conflicts, barriers, and atrocities Nimiipuu have endured. Then, read the passage below provided by the Confluence Project and describe how resilience is demonstrated.

"The 1877 Nez Perce War occurred when the [Oregon Nimiipuu (Wallowa Band)] refused to be forced to move to an Idaho reservation, because the removal violated the June 11, 1855, Treaty with the Nez Perce. The treaty had reserved 7.5 million acres of land in the Washington and Oregon Territories for the Nez Perce. The Battle of Big Hole occurred in August 1877. The US Army, led by Col. John Gibbons attacked a Nez Perce encampment in Wisdom, MT. The band was on their way to join Sitting Bull in Canada. Sixty to ninety Nez Perce were killed. An example of the Nimiipuu retreating from the U.S. Army."

Wilfred Scott (or Scotty) is a respected Nez Perce elder and veteran. Scotty grew up in Montana and was in the Navy between 1951-72. Scotty was instrumental in initiating the Red Heart Band Memorial ceremony at Fort Vancouver, that honors and mourns the loss of the Nez Perce who were imprisoned there.

Bessie is his high school sweetheart and wife. She speaks Nez Perce and is part of the staff for the Nez Perce Language program keeping the language and culture alive.

Watch Wilfred and Bessie Scott: Battle at Big Hole

Video link: https://vimeo.com/244922624

Task: As a class, 1. develop a list of conflicts, barriers, and atrocities Nimiipuu have endured; and 2. Students think, pair, and share their descriptions of how resilience is demonstrated in the Battle of Big Hole experience that was shared.

MODULE CONTENT (LECTURE, SLIDES 8 - 21)

1. Introduction (SLIDES 8 – 10)

"Nimiipuu culture in the mid-18th century was a symbolic pattern of landscape, objects, people, and habits that provided the means to meet the physical, social, and spiritual challenges of their homeland in the Columbia Plateau, in the northern Rocky Mountains, and over the northern Great Plains. The use of these maze ways, or habitus inclusive of the landscape, constituted their world – a taskscape. Thus, their motivations and thoughts come on often differing among individuals, about how to act in meeting those challenges arose from those physical, cognitive, emotional, and behavioral actualities.

This complex setting was already under considerable pressure by the time these people came in on to the written historical horizon in 1805, when Lewis and Clark passed through the homelands of the next church people. Some of these earlier pressures for change, such as the first, enabled expansion, intensification, and innovation of some social cultural patterns at the expense of others. Other changes, such as a new disease environment contributing to constant population decline, or dangerous to the path of life followed by Nimiipuu peoples. Second after Lewis and Clark all these changes increased in pace, intensity, and persistence as Nimiipuu were drawn into the developing world-system. In brief, Nimiipuu in the mid 1800s were already in an apocalypse driven by disease, violence, hunger, social chaos, and ecological change. These 'stressors' were not wrought by distant forces but brought into Nimiipuu Wéetespe (Nez Perce Earth) by settlers who, through the use of force, literally 'made the rough places smooth, and the crooked places straight.'

They continue to do so. Ongoing development by settler-colonists erodes the fundamental aspect of any dominated society: its relationship with 'the environment.' Nimiipuu culture is not found in this chapter, or in libraries, or in various media; it is found atop the mountains, on the prairies, in the valleys, and within the rivers. As 'the land' – wéetes – continues to be altered, there are fewer and fewer Nimiipuu symbols, and there is less and less space and time in which Nimiipuu habitual action, feeling, worldview, and speech can occur. These changes cue the transgenerational trauma that Nez Perce people often experience. Many contemporary Nimiipuu continue to work to meet

these continuing health, social, and cultural challenges by protecting and expanding that 'traditional' spacetime...

'The Earth' – wéetes – has been fragmented and thus Nimiipuu have been fragmented culturally, socially, and individually. Families are often in disarray. These are the 'soul wounds' they suffer.

It is true that Nimiipuu are changing as they move into offices and cubicles from the fishing sites, the root-digging grounds, the hunting grounds, the Berry patches, the trails and campsites. This change cannot do anything but alter their toolkits, actions, feelings, and thoughts. And this change creates conflicts in their bodies and identities, and their societies and culture.

But they entered these new places in order to protect what remains of their ancestors' legacy, to reclaim and revitalize what has been taken. The profound issues of these generations are land ownership, water, fish, and wildlife – and how to protect these. In other words, caring for the earth and restoring, insofar as it is possible, the pattern of life found in kinship and the more-than-human community. This goal – to rise from the ashes – is seen in a variety of actions ranging from environmental restoration and land management to jurisdictional/legal issues and land 'preservation.'" (Marshall and Pearson, 2020)

There are numerous texts that reference the post-colonial history of the Nimiipuu and the experiences endured. Resilience though is the foundation of who the Nimiipuu have been, are today, and will be in the future. Sustainability as a concept, cannot fully address the depth that resilience is.

"People always talk about 'ecosystem management' and 'holistic management.' Too often I see those concepts focused on such things as sustainability of trees and forage (commercial enterprises). The sustainability of traditional foods and medicines are never discussed. For many of these people the sustainability of the salmon is not important. Many of these people are only interested in sustainability of large commercial economies, such as grazing, mining and timber. So it's easy for other resources like the salmon to get pushed aside. For many the salmon and other natural resources are looked at as being in the way. who is going to speak on behalf of the salmon question mark up to this point has been the [Nimiipuu] and some special interest groups who have been trying to get the voice of the salmon heard." (-Jaime Pinkham (Nez Perce)" (Landeen and Pinkham, 1999, p. 113)

The multiple strands of resilience described in this module include formal initiatives in climate, COVID-19, food sovereignty/security, and education. The mere continued existence of each Nimiipuu descendant is an embodiment of resilience, which is based on the individual and collective lived experiences of Nimiipuu since time immemorial and is too immense to address in this module but have been described in previous modules.

2. Climate Change (SLIDE 11)

Read the text below from the Nez Perce Tribe's Climate Smart, Culturally Smart Conservation webpage:

"The Nez Perce Tribe has three projects that are climate smart and culturally smart to enhance our efforts to assess vulnerability, plan adaptation actions, and provide solutions. The Restoration Toolkit for Ecological and Cultural Resilience, the Camas to Condors Project, and the Climate Smart Agriculture Project.

"Conservation for conservation's sake is just another way of commodifying nature with no real value to Indigenous people. The value comes through the interactions with nature as we have been doing for millennia. So, when you have conservation programs in hopes of creating biodiversity we must always remember to reinforce the cultures and identities of the people who watch over and help maintain such biodiversity. Why is this important? Here is a quote to explain why: Indigenous Peoples protect 80% of global biodiversity on a mere 25% of the planet's land with less than 5% of the world's population." ~Dr. Michael Kotutwa Johnson—Traditional Hopi Dryland Farmer, Research Associate at the Native American Agricultural Fund & member of Rising Voices –https://nativeamericanagriculturefund.org

What is Climate Smart Conservation?

As the climate crisis intensifies, it is essential to design conservation projects for resilience under a broad suite of potential climate scenarios. Well-connected networks of habitat are more important than ever, as more than fifty percent of species are already on the move worldwide due to climate change. Climate-smart conservation focuses on diversity, refugia, functional integrity, ecosystem processes, evolutionary resilience, and close observation..

Increasing the number of species with flowers or fruit available during all seasons is one way to increase resilience and respond to changing phenology. The Tribe has completed a climate smart, culturally smart planting design tool called the restoration toolkit for ecological and cultural resilience or RTCER.

Why include culture in conservation?

Cultural survival for most indigenous peoples is directly tied to their relationship to place, land, water, and plants and animals in their homelands.

The traditional knowledge of indigenous peoples worldwide maintains records of climate, phenology, wildlife, and land management practices that benefit ecosystems and humans.

Ancient stories and practices are lessons in responsive sustainable management. Including culturally important species, indigenous practices, or access for traditional knowledge keepers into conservation projects can help build resilience for all species, guide us to new scientific questions, and remind us to reconnect with our relationships and responsibilities to each other and to all life.

The Tribe and our partners are also working on the Camas to Condors Project, a project that focuses on cultural survival in landscape level conservation planning. The Tribe, Yellowstone to Yukon, Greater Hells Canyon Council, Nimiipuu Protecting the Environment, and David Mildrexler are the founders of this project.

We need tools to include culture and ecology.

Even for tribal staff, it can be challenging to include cultural uses in restoration projects & management treatments. We believe that finding ways to include culturally significant species in restoration planning design could improve ecosystem resilience, ecosystem services, and assist indigenous peoples with cultural survival. We also recognize the challenges, needs, and guidelines for working with traditional knowledge and tribes.

The Nez Perce Tribe's Water Resources Division and Point Blue Conservation Science modified a climate smart planting tool with species in the inland PNW, and added cultural values to it. This toolkit is designed to help the tribe's restoration practitioners and partners include culture and climate in their planting designs.

We are also working on a climate smart agriculture project to help farmers improve their soil and productivity, water retention and drought resilience, and to improve water quality and flow to try to reduce stream temperatures for fish, improve riparian habitat for wildlife, and increase pollinator diversity."

COVID-19 (SLIDE 12 - 13)

With the COVID-19 pandemic prevalent in Nimiipuu homelands and community, there have been multiple avenues in addressing the problem. Reflecting on the past pandemics and continuing to value Nimiipuu culture and traditions, the Nimiipuu have actively addressed the COVID-19 pandemic systematically on the Nez Perce Indian Reservation, but also across their homelands in Idaho, Washington state, and Oregon.

On March 5, 2020 the Nez Perce Tribe COVID-19 Task Force announced that there were no confirmed cases in Idaho. Despite the efforts (i.e. the Nez Perce Tribe Stay-At-Home order), on May 1, 2020 Nimiipuu Health (the Indian Health Services providing healthcare to Nimiipuu and local community) announced the first positive tests of the novel coronavirus. Prior to Nimiipuu community exposure, there was ample planning through the Emergency Operations Command, communication specific for the community (including live updates via social media from the Nez Perce Tribe Executive Committee Chairman, Incident Commander, and Nimiipuu Health Medical Director), webinar and online resources distributed, and guidelines set and implemented. Review the Nez Perce Tribe COVID-19 Updates: https://nezperce.org/wp-content/uploads/2021/05/NPT-COVID-19-Update-Log.pdf (posted chronologically with the most recent on top).

Support for the community was allocated at various times throughout the pandemic, including financial support, organized subsistence hunts, and food/supply distributions (including cleaning/disinfecting supplies and laptops/tablets for youth). As a sovereign government, the Nez Perce Tribe has taken actions in preparation and adaptation. As a community, countless acts of leadership, protection, and healing have been demonstrated.

The same plants, animals, sacred places, and ceremonial knowledge that sustained the Nimiipuu was deployed to address the COVID-19 pandemic. Preparation, a longstanding value that is emphasized in numerous legends, is prevalent today. Plant medicines had been stockpiled by those who have the knowledge and connection to the relatives; Hunters and fishers were safely organized and supported to harvest animal relatives (buffalo, salmon); and sacred places and ceremonies continued with adaptations to follow COVID-19 protocols as directed by the Nez Perce Tribe Emergency Operations Command. The community continues to rely upon the old ways, the old medicines, the old foods, songs, and prayers for protection and healing through the pandemic. To rely upon ancient old – thousands of years old - practice and knowledge, in tandem with modern protocols and practices, the Nimiipuu community has kept themselves relatively isolated, although not completely clear from COVID-19 deaths.

As of June 25, 2021 Nimiipuu Health administered 2,836 vaccines to tribal citizens and the greater community. The Nez Perce Tribe is currently following the protocol of Stage 4 of the Idaho Rebounds guidelines. This permits gatherings of more than 50 people, with proper protocols in place. Non-essential travel can continue to locations that allow. The Tribe has adapted the Idaho Rebounds guidelines throughout the pandemic with specific notice to the needs for protection and healing that the Nimiipuu require. Every loss in the community is significant, every life is sacred. As previously described, the ways in which cultural protocols are followed during times of pandemics/epidemics are adapted as needed. The Nimiipuu honor the ways of their culture and recognize the need to remain adaptive for their existence to persist.

Watch the <u>Nimiipuu Speaker Series Ep. 1</u> (link: https://youtu.be/Klhpmna8qjY), a panel discussion with Nimiipuu – Nakia Williamson, Mary Jane Miles & Katherine Jackson – regarding the history and life experiences with pandemics and disease.

The impact of the pandemic has largely been experienced physically, emotionally, economically, environmentally, and spiritually by the Nimiipuu. There is not concern as to what has happened as "good or bad" but instead, seek to understand the balance of tamálwit, Natural Law.

3. Food Sovereignty/Security (SLIDE 14 – 15)

Read the text below from an article, Reciprocity of Tradition:

<u>Link: https://www.oregonhumanities.org/rll/magazine/union-spring-2020/reciprocity-of-tradition/</u>

"Throughout human memory, the Indigenous peoples of the Columbia Plateau have adhered to a physical and spiritual philosophy of reciprocal, equitable, and equal relationships between human beings and with the natural world around them. Times of abundance and times of hardship are shared by their communities as a whole. Community members are expected to contribute according to their roles, skills, and abilities, and protocols exist to ensure care for Elders, children, the sick or disabled, and the needy. This philosophy, called Tamanwit by people of the Columbia River watershed like the Yakama, Walla Walla, Umatilla, and Cayuse, and Tamalwit by the Nimiipuu (Nez Perce) living farther up the Columbia, Clearwater, and Snake River watersheds, is also known as the

unwritten or original law. Tamanwit provides for a sustainable relationship with the natural world as well as a sustainable human society.

Yakama tribal Elder Wilson Begay, who is from the village at the former site of Celilo Falls on the Columbia River, once told me, "The Big River Council of fish chiefs from the different bands used to meet and talk about livelihood and who they needed to help that year. Who needed help with extra food, or fixing up a fishing site. It wasn't about controlling, it was just about general life, to help each other and look after each other."

The reciprocity woven into Tamanwit allowed tribes of the plateau to thrive in their homelands for millennia. It includes rules of conduct such as "Never take more than you need" and "Always leave something for those who come behind."

After the arrival of imperial colonialism—a way of life that commodifies human and ecological relationships rather than embracing them as reciprocal gifts of sustainable existence—the ecological and social safety nets maintained by Tamanwit began to unravel. Despite colonialist efforts to erase their culture and traditions, Indigenous communities are still embracing those sacred gifts and Ways to help strengthen and repair their union with each other and with the land...

The Nez Perce Tribe has invested resources in restoring the ecology of the waters in their homelands, giving jobs to people like Levi and helping the community access traditional food sources, called First Foods by local tribes.

When a community acts as a whole to prioritize lifeways such as Tamalwit, the benefits cascade throughout that community. Those benefits are particularly necessary today for Native communities struggling to recover from the gaps in opportunity that were forced upon them.

Nearly eliminated by eradication programs, lamprey were once regarded as a "pest fish" by the state of Oregon. But they've been a food source for the Plateau Tribes and other native species of the region since time immemorial, and are now understood to serve a vital role in river ecologies. The tribes of the Columbia River watershed have used the sovereign treaty rights they possess to force legal actions that protect ecological interests, such as the construction of fish passageways in many of the region's dams. The Treaty of 1855, which tribes like the Nez Perce and the Cayuse, Walla Walla, and Umatilla (CTUIR) signed, promises that the tribes shall retain access to all of their original food sources on all federal land and jurisdiction within their homelands. This set a legal standard that forces the federal government to take action to preserve those so-called natural resources where it has the authority to do so.

Tribes have continued to use their treaty rights and ecological protocols to work with other conservation organizations and agencies to aid in the recovery of all threatened species native to their homelands, and to revive subsistence practices that were damaged by environmental destruction and forced assimilation policies. In recent years, 1855 Treaty tribes from the Columbia Plateau have reestablished their seasonal practice of traveling over the Continental Divide to hunt wild American bison near Yellowstone National Park...

The hunts are strictly managed by tribal conservation officers and guided by tribal protocols and expectations. All parts of the animal but the guts must be removed and used. Significant amounts of the meat must be given away to those in need. Hunters don't hunt just for themselves, but to feed their community and to provide for cultural events, which often involve community feasts and gift-giving ceremonies. Those traditions remind people of the reciprocity required by the unwritten laws.

Many young Indigenous families today are working to ensure that their children and the following generations have the opportunity to embrace all of the sustaining gifts inherent to Ways such as Tamanwit..." (Whittle, 2020)

Each of the traditional foods experience change – the many species of fish, the small and large game, the roots, and the berries. Distribute the next page (Student Content: Food Sovereignty/Security) and instruct students to read the article <u>Salmon and the Adaptive Capacity of Nimiipuu (Nez Perce) Culture to Cope with Change</u>. They should consider how resilience and sustainability of Nimiipuu culture are described; and describe how this may also be reflected with the other foods.

Student Content: Food Sovereignty/Security

Read the article below:

Salmon and the Adaptive Capacity of Nimiipuu (Nez Perce) Culture to Cope with Change

Consider how resilience and sustainability of Nimiipuu culture are described; and describe how this may also be reflected with the other foods.

Each Change due to natural disturbances and disasters, population growth and decline, economic crises, and environmental and climate change creates significant cultural challenges. (1) Rapid change and the transformation it brings also involve complex relationships between sovereign tribes, resources, and the global system. This article explores how salmon and the Nimiipuu (Nez Perce) people who depend upon them survive given invasion and treaty making, population decline and growth, destruction of salmon habitat and damming of streams, and impending climate change. (2)

Salmon and Nimiipuu survival are interdependent, and without salmon the Nimiipuu say their culture will die. The Nimiipuu revere salmon as a cultural keystone species, which, for the Nimiipuu, are those species that they rely upon "most extensively to meet their needs[,] ... are the species that become embedded in cultural traditions and narratives[,] ... and [are] the ones on which they focus in their immediate activities and conversations." (3) As cultural keystones, Nimiipuu and salmon have forged long-standing economic and spiritual relationship and have coped with continuing change since at least the last Ice Age and perhaps even before that time.

Horace Axtell, a Nez Perce elder, commented in September 2008 on the relationship between water and salmon and Nimiipuu culture: "According to our spiritual way of life, everything is based on nature. Anything that grows or lives is part of our spiritual life. The most important element we have

in way of life is water. The next most important element is the fish because the fish comes from water." (4)

This emphasis on the interdependency of salmon and Nimiipuu culture requires some clarification. The research presented here draws from more than a decade of my ongoing collaborations as an anthropologist working with the Nimiipuu and tribal programs and before that with a lifetime of dedicating myself to the understanding of rivers, including serving as a professional fly-fishing guide for more than ten years in the Nimiipuu watersheds of the Snake and Columbia Rivers. I also draw insight from a careful reading of the published literature in Native American and Indigenous studies and related cognate fields of anthropology, history, geography, and ecology.

Thus, the centrality of salmon to Nimiipuu culture demonstrates that https://human-animal relationships of this magnitude are not overly simplistic or static, nor are they, as some say, a last-ditch effort to gain hold of salmon with tribal sovereignty in some linear, political-cultural context. Rather, the Nimiipuu have adapted in the face of change for more than four hundred generations and twenty-five hundred salmon generations.

In short, the central assertion of this article is twofold: (1) nothing is forever, and change is constant; and (2) the Nimiipuu have retained their adaptive capacity through many substantial changes, and Nimiipuu culture is the strength from which adaptive capacity emerges. Nimiipuu survival is not about trying to sustain some condition from a changing state; rather, Nimiipuu survival is about constant adaptation to the changing needs of Nimiipuu society and culture as a dynamic system. Moreover, the main interest in adaptive capacity is that neither <u>resilience</u> nor sustainability necessarily provides adaptive capacity, while culture does. Resilience and sustainability connote returning to or maintaining some previous state. The Nimiipuu have adapted to dramatic population, environmental, and sociopolitical changes. Thus, what are the features of Nimiipuu culture that make it adaptive?

NIMIIPUU CULTURE AS ADAPTIVE

A long and diverse history provides many insights into Nimiipuu adaptive strategies. First, the Nimiipuu have maintained an Indigenous knowledge system of water and migrating salmon that has been told in tribal narratives since the people have lived in the drainages of the Snake and Columbia Rivers. This realization focuses on Nimiipuu and salmon responding to periods of great change and how they reorganize themselves to cope with that change. Moreover, the Nimiipuu and salmon migrate across many jurisdictions and scales and swim through many cultures and environments, linking together complex social, political, and economic relationships. Second, the Nimiipuu's encounters with salmon suggest that "local knowledge, environmental values, place attachments, and cultural landscapes are all functionally interdependent" so sovereignty in land and salmon gives the Nimiipuu a base of power. (5) The Nez Perce use the Treaty of 1855 as an example of an adaptive strategy in asserting both land and use rights, which are critical for Nimiipuu survival and well-being in a changing sociopolitical system. Third, vision and strong leadership enable the Nimiipuu to prepare for the future. This is ultimately about setting a direction or path. In short, Nimiipuu examples of effective leadership show how vision or worldview can change the dynamics of

a particular situation. This article explores these three criteria in the context of adaptive capacity to explain how the Nimiipuu use their culture to persist and adapt to change.

Culture is the strength from which adaptive capacity emerges, and cultures that persist adapt to economic and ecological surprises—these are the unpredictable events that are outside the range of recent experience. For example, the Nimiipuu have adapted to four recent shifts since A.D. 1700: the introduction of the horse and a period of significant and rapid population decline; the 1855 Treaty negotiations to preserve their sovereignty; dam building, which has threatened the persistence of salmon; and their leadership in salmon conservation and restoration. Each of these adaptations has operationalized Nimiipuu adaptive capacity.

The sustainability and resilience literature draws from concepts of adaptation to explain how human communities react to change, especially environmental and climate change, in the context of vulnerability and adaptive capacity. In the Native American and Indigenous studies literature, however, adaptive capacity has received little attention. Anthropologist Iulian Steward developed the concept of "cultural adaptation" to explain how regional societies, or "core groups" adapted to the natural environment through subsistence activities. (6) From an interdisciplinary framework, geographer William Denevan explains cultural adaptation "as a process of going beyond both biological and physical stressors to include cultural shifts that respond to a change in the physical environment or a change in internal stimuli, such as demography, economics and organization." (7)

Newer perspectives on adaptation research focus on local to global linkages; historical contingencies such as can be deciphered from local, regional, and global histories; human populations as active agents in the construction of their environments, including forms of resistance, accommodation, adjustment, and transformation in the modes of production and reproduction; and ideology and knowledge as concerns not only of scientists but of the people that are the subject of the study. (8)

I build on the concept of adaptation by demonstrating how the Nimiipuu use the agency of their culture as an adaptive strategy when confronting change, including adjusting to subsequent damages and taking advantage of any opportunities change may bring.

The Resilience Alliance identifies four features of any social-ecological system that make it adaptive: (1) learning to live with change and uncertainty; (2) nurturing diversity for resilience; (3) combining different types of knowledge for learning; and (4) creating opportunity for self-organization toward social-ecological sustainability. (9) These features are similar to the Nimiipuu's knowledge systems,

strong leadership, and vision for the future. The Resilience Alliance does not mention the issue of sovereignty, nor are these features ones that social scientists would commonly discuss.

The analysis in this article takes a culture perspective to expand the definition of adaptive capacity found in the report Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations as "the general ability of institutions, systems, and individuals to adjust to potential damage, to take advantage of opportunities, or to cope with the consequences." (10) On the other hand, resilience can also be the "capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks." (11) Nimiipuu cultural systems are therefore characterized as those that "tend to maintain their integrity when subject to disturbance" and those where the "informal concept of stability refers to the tendency of a system to return to a position of equilibrium when disturbed" (12) This article describes what makes the Nimiipuu people and their culture adaptive and flexible in the context of great change.

Physical structure, institutions, and symbolic representations do not make a system adaptive; culture does. Every human culture is the unique, cumulative product of people interacting with other people and particular places over a history stretching into the remote past. Nimiipuu culture refers to an interconnected group of people who self-identify as Indigenous people and who share distinctive cultural practices. Culture includes the material and the spiritual and thus has mental, behavioral, and material aspects. (13)

Outsiders can impact aspects of culture in different ways. Culture is learned and shared and includes symbolic information and meanings encoded in language, behavior, and objects. In changing circumstances, culture must be created, maintained, revised, and reproduced through time. When culture is understood in these ways, it becomes clear that anything that outsiders do that disrupts the ability of Nimiipuu society and culture to exist, function, and be reproduced may have negative impacts on the Nimiipuu people and their environment.

Culture is the most basic concept in understanding adaptive capacity, and culture is a valuable tool for learning how people construct and manage their world. What's more, social and environmental problems contain cultural underpinnings, and social and environmental problems can be solved with cultural solutions. Cultural solutions provide contrasts between forms of production and distribution. Cultural solutions also help explain the different impacts of these cultural systems on the natural environment. The global market economy, as presently constituted, thrives on high levels of local specialization and interdependence in which local communities generally do not consume the products they produce and market exchanges occur with individual profit as the primary motive. The goods and services that sustain life have become commodities that are not freely available and can be affected dramatically by rapid changes in availability, currencies, market tastes, political upheavals, and technological changes. This analysis identifies Nimiipuu cultural features as important defining qualities of continuously adapting to change. Moreover, Nimiipuu culture is a tool that the Nimiipuu use and modify to meet their needs and to solve problems.

An article in the journal sponsored by the Resilience Alliance, Ecology and Society, is very suggestive of the process I am proposing. In the article "Powerless Spectators, Coping Actors, and Adaptive Comanagers: A Synthesis of the Role of Communities in Ecosystem Management" the authors view "adaptive manager" communities as having both the adaptive capacity (i.e., culture) and the governance capacity (i.e., sovereignty) to incorporate and sustain adaptation to a changing world. The Nimiipuu as adaptive managers use their culture in novel and profound ways in the stewardship of managing migrating salmon and Nimiipuu land and society. The authors go on to state that adaptive manager communities have:

both adaptive capacity and governance capacity to sustain and internalize this adaptation. They invest in the long-term management of ecosystem services. Such communities are not only aware of the threats, but also take appropriate action for long-term sustainability. Adaptive co-management becomes possible through leadership and vision, the formation of knowledge networks, the existence or development of polycentric institutions, the establishment and maintenance of links between culture and management, the existence of enabling policies, and high levels of motivation in all role players. Adaptive co-managers are empowered, but empowerment is a consequence of the capacity for governance and the capacity to adapt, rather than a starting point. Communities that are able to enhance their adaptive capacity can deal with challenges such as conflicts, make difficult trade-offs between their short- and long-term well-being, and implement rules for ecosystem management. This improves the capacity of the ecosystem to continue providing services. (14)

So what makes the Nimiipuu adaptive managers, and, most important, what makes Nimiipuu culture adaptive? The following discussion illuminates three criteria of Nimiipuu culture in the context of adaptive capacity as (1) the continuation of an Indigenous knowledge system; (2) the establishment of sovereign relations and power; and (3) a tradition of strong leadership that includes a vision for the future and the ability to forge and maintain partnerships. The discussion shows how Nimiipuu adaptive strategies are vested in a distinct Indigenous society, with longstanding relationships to water, salmon, and place attachments in the Columbia and Snake river basins of northwestern North America.

SALMON, WATER, AND NIMIIPUU KNOWLEDGE SYSTEMS

Contemporary Nez Perce culture is rooted in a small-scale, highly egalitarian, and democratic society that has been successfully living in the Columbia and Snake river drainages for thousands of years. The Nimiipuu fashioned their Indigenous society to primarily support and reproduce households while safeguarding the environment. Population densities throughout much of the past remained low, and the Nimiipuu organized themselves into linguistically affiliated bands, interspersed throughout the region by correlating watersheds, or subbasins. In the earliest of times, Nimiipuu subsistence required constant mobility and demanded a broad utilization of subsistence resources.

Several theories offer explanations as to how salmon became a primary <u>food</u> source. Many scholars argue that in order to utilize salmon, Indigenous societies must have developed economies that

invested in efficient fishing technologies and highly developed social organizations. (15) This social-ecological system was designed around the harvesting, procurement, and trading of salmon species. As a result, the Nimiipuu developed a complex fishing technology and set of narratives around harvesting species of chinook, coho, chum, and sockeye salmon; cutthroat, lake, Dolly Varden, and steelhead trout; and different varieties of whitefish, sturgeon, suckers, lampreys, and pikeminnows. The archaeological record and early ethnographic accounts suggest precontact fish consumption at roughly five hundred pounds per adult per year. (16)

In addition to fish, the Nimiipuu used plant resources for food, medicinal, and industrial purposes. Although the Nimiipuu did not actively domesticate, plow, and fence fields of a single species, they did in fact practice a "mode of agriculture" in the manipulation of several plant foods. (17) Nimiipuu men hunted for game and harvested fish, and Nimiipuu women harvested an abundance of plant foods, including three main root crops: camas, biscuitroot, and snowdrops. Nimiipuu women harvested root crops by prying them back and loosening the soil with a digging stick. The soil was then broken up by hand, and the roots were sorted. Only mature roots were taken; the smaller roots were replanted in the original root-digging area. The sex of the roots were also determined, and root diggers often made sure to leave a good mix of mature bulbs to ensure future root crops. Another important method of plant management was the use of fire. The Nimiipuu intentionally set fire to camas fields, for instance, to improve the yield of their most important root crops. Disturbance of the soil from managed firing did two related things: it facilitated plant growth, and it encouraged the reseeding of the disturbed area. The deliberate actions by Nimiipuu women both increased harvest yields and provided the Nimiipuu with significant amounts of storable plant foods.

Ultimately, then, Nimiipuu use of fish resources and native plant foods is a matter of subsistence intensification, the building of extensive kinship networks, and the formulation of an expansive trade and commerce network. These elements, coupled with the addition of the horse around A.D. 1700, made the Nimiipuu a powerful tribal nation. More than this, the horse was bred by the Nimiipuu to fit their cultural needs. The breeding techniques appear to have grown out of their land management and are now used in breeding programs to restore salmon.

In 1770 the Nimiipuu were the largest tribal society in the interior Columbia River basin, with population estimates of more than six thousand. (18) Early Nimiipuu society exemplified the smallest-scale condition, but late precontact Nimiipuu social practices centered on a complex and democratic system of communal housing, food storage, village life, named and ranked positions of leadership associated with the redistribution of resources, large raiding conglomerates, and encampments of more than a thousand people comprised of various aboriginal groups, linking the Nimiipuu both symbolically and economically with other Indigenous entities on the plateau. By 1835 Nimiipuu numbers had dropped to around sixteen hundred.

Centrality of Salrnon and Water

Salmon and water serve as ideological and material foundations of Nimiipuu knowledge and survival. (19) Without them, Nimiipuu creation and traditional religious expression is nonexistent. The Nimiipuu respond to these traditional (waliirn) resources with prayer and reverence. For instance, the

Creator (haniyaw'aat) made both the world and humanity, and the foundations for life express a particular history in environment and place. Nimiipuu interactions, in this regard, are a matrix of <u>labor</u>, ceremony, and place told in terms of water (kuus) and salmon (lewliks). (20) Due to reduced catching opportunities, some ceremonies use salmon obtained in nontraditional places and ways.

Nimiipuu stories and the history of kin relations and community are tied to salmon and water, with individual and collective identities vested in symbolic and material sources of water in the Columbia basin, in migrating salmon, and in places to fish for salmon. Moreover, the Nimiipuu develop relations and identity in regard to family, band, and tribe and their relations to land, water, and salmon. Social cohesion and basic values are enhanced and governed by these relations. "We need the salmon for our future and for our children" proclaims Nez Perce elder Julia Davis-Wheeler.

We need the salmon because it is part of our lives and part of our history. The salmon is a part of us, and we are a part of it. Our children need to be able to feel what it is like to catch and eat salmon. They need to be able to experience that sense of respect that many of us have felt in past years. (21)

So while the salmon ecosystem is radically changed by habitat loss and dams, salmon and water continue as a life-giving theme.

Salmon and water are widely used in Nimiipuu daily life and ceremony and are necessary for the fulfillment of individual and community life. For example, drawing from more than four decades of ethnographic fieldwork with the Nimiipuu, anthropologist Alan G. Marshall records even today that

some active fishermen take up to 20o or more salmon per year. Men who are able to do this receive high praise and prestige because they provide the necessary raw resources to women for the production of Indian food for their families and communities. Families with enough fish to eat as a normal part of their diets are regarded as traditional. Such families are considered strong spiritually and as authorities on Nez Perce Indian life and history. (22)

Furthermore, Nimiipuu use of salmon and water is essential for tribal-traditional births; funerals; testimonial giveaways for the first anniversary marking an individual's death; weddings; name-giving ceremonies; first salmon, first kill, and first roots ceremonies marking adulthood; and powwows and other celebrations, including dinners conducted to share and give thanks to the joy of life. The dinners, which are both ritual feasts and nonritual meals, ideally include items unavailable for purchase in supermarkets, including water (kuus), chinook salmon (nac'box), meat such as elk, deer, moose, and bison (nuukt), roots (qaaws), and huckleberries (cemiitx). The capture of all these traditional foods is thought of as a gift (pinitini) by the Creator, because these living beings gave up their lives so that the Nimiipuu can continue to prosper.

For fish, Nimiipuu prefer salmon, first chinook (nac'box), then sockeye (q'oyxc), and lastly silver (k'allay). Nimiipuu also use eels (hesu'), sturgeon (qiilex), and steelhead (heyey), all anadromous fish, and other native fish, including cutthroat (waw'alam) and bull (is'lam) trout, northern pikeminnows (qi'yex), suckers (mu'quc), and chiselmouths (tite'wxc). Nonnative fish species, such as carp, walleye,

and bass, are rarely if ever used, regarded as either culturally insignificant or unimportant. Store-bought fish is unacceptable. Chinook salmon from hatcheries is acceptable; it is not preferred, but sometimes it is a necessity for twenty-first-century ceremonies. Fish other than chinook salmon is generally disliked, and one could argue that the preference for native species is more healthy and in keeping with the local environment and culture.

Water (kuus), just like fish, has an ideological and material importance to Nimiipuu cosmology and everyday survival. From an ideological perspective, water is home to powerful spirits, and, materially, water is used for medicine and healing purposes. According to Nimiipuu cosmology, eddies and confluences of free-flowing rivers and waterfalls are thought of as the homes of spirits; thus, the Nimiipuu see dams as killing streams. Similar to how Nimiipuu regard fish, not all water sources are considered the same or equal in both importance and preference. Springs possess the purest, strongest, and most spiritually powerful water and are used in the ritual sweat house, where the water is poured on hot rocks. Cold flowing water from high mountain streams is less preferred than spring water but is considered "better" than water that runs at lower elevations, with less velocity, and at higher temperatures. Nimiipuu water priorities reflect adaptive capacity because spring water most often has fewer pollutants than water at lower velocity and higher temperature, which is better habitat for pathogens.

Water (kuus) and salmon (lewliks) are therefore essential to everything that is Nimiipuu and are found in streams and rivers of great cultural importance. Nimiipuu elder Levi Holt comments on water: "The tribes have always treated water as a medicine because it nourishes the life of the earth, flushing poisons out of humans, other creatures, and the land. We know that to be productive, water must be kept clean. When water is kept cold and clean, it takes care of the salmon." (23) Moreover, basic values and beliefs in water and salmon are evident as moral instruction in Nimiipuu traditional stories such as "Coyote Breaks the Fish Dam at Celilo" "The Maiden and the Salmon" "How Salmon Got over the Falls" and "Coyote and Salmon." (24)

Nimiipuu tribal elder Allen Pinkham speaks of a time before humans when the Creator asked that all the <u>animals</u>, including salmon, come forward to help the new human beings in his account titled "A Meeting between Creator and the Animals":

Salmon and Steelhead came forward and said, "We can help the human beings with our flesh." Salmon said, "When we come up the river we will die, so the human beings will have to catch us before that happens. I'll come up only on certain times of the year, and that's when they'll have to catch me." Then Steelhead said, "I want to come in the wintertime, but I'll give them something special. That will be the glue from my skin. This glue can be used to make bows and spears. I'll be in the water all winter long." So Creator let Steelhead become qualified. Sockeye Salmon came forward and he said, "I don't want to be big like Chinook Salmon and Steelhead, and my flesh will be red because I will eat different foods." Then Trout came forward and he said, "I am going to look like Steelhead, but I am not going to go down to the ocean. I'll just stay here in the waters even in the winter, and if these human beings can find me they can have me for food. But in the wintertime I will be down in the gravel and if they can find me that's where I will be." Then Eel came out and said, "I don't

want to look like the Steelhead or Salmon or Trout. I want to be long, and when I rest I want to put my mouth on the rocks. But I'll come up the river every year, and they can use my flesh for food." So this is how the fish became qualified. (25)

Stories illuminate the creation of the world and the beings that inhabit it and include places in the Columbia and Snake river drainages, from Celilo Falls on the mid-Columbia to the tributaries of the Snake River and containing the Palouse, Tucannon, Clearwater, Grande Ronde, Salmon, Weiser, and Payette Rivers in the Snake River basin. Except for above the lower falls on the Palouse River, all these rivers and streams supported annual returns of salmon, and all the subbasins, including the Palouse River, flourished with abundant springs, cold running water, waterfalls, and deep holes and eddies.

Sovereignty in salmon gives the Nimiipuu power. In the Treaty of 1855 Nimiipuu sovereignty was threatened. The Nimiipuu successfully reserved the right to fish for salmon at all "usual and accustomed places." The treaty established both land and use rights, significantly reduced from pretreaty levels, that were critical for continuing Nimiipuu survival. The Nimiipuu established land rights that retained for them a base of power, and use rights preserved the Nimiipuu's opportunity to invest in a whole range of land and resource uses, including the stewardship of salmon and confronting larger ecosystem processes such as global climate change. The role of treaties maintained the Nimiipuu as a sovereign nation, with distinct rights to both salmon and water. Article 3 of the 1855 Treaty states:

The nineteenth and twentieth centuries marked a period of great change and reorganization, and the 1855 Treaty contained, in part, Nimiipuu adaptive strategies to resolve conflicts and to move toward strengthening a strong, sovereign nation. During the 1855 Treaty meeting at Walla Walla, the Nimiipuu showed leadership, even under difficult circumstances, by arriving late to the treaty negotiations. In doing this, the Nimiipuu served notice with their behavior that they wanted to be treated as equals in the treaty negotiations.

Increasing pressure for land prompted the government to respond with top-down policies of removal and failure to fulfill treaty agreements. The treaties, which were later ratified in 1863 and 1868, established legal ties between the Nimiipuu and the United States while greatly reducing traditional Nimiipuu territory. The treaty retained for the Nimiipuu a smaller portion of their territorial homeland and off-reservation rights to fish, hunt, and gather at "all usual and accustomed places."

After more than two-decades of having sovereign control of reservation lands, Congress passed the Dawes Allotment Act in 1887. President Grover Cleveland designated the Nimiipuu to be "on the first list of tribes to be allotted under the newly passed Dawes Act." (27) The Dawes Act allotted each

Nimiipuu head of household 160 acres, individuals over eighteen years of age 80 acres, and those under eighteen, who were mostly orphans, 40 acres. More important, the Dawes Act was a carefully crafted policy aimed at dividing and destroying communally owned property. It also encouraged the divestment of additional Nimiipuu traditional lands through a process of individual landholdings, which in turn set a precedent for the development of industrial agriculture. (28)

Prior to the development of industrial agriculture and, later, large dams, nearly 10 to 16 million salmon returned to the Columbia-Snake watersheds each year. What this shows is that the Nimiipuu took a deliberate role in shaping outcomes, with purposeful management of salmon. Nimiipuu adaptive management may also have contributed to the noteworthy abundance of salmon before the arrival of European Americans. Senior fisheries biologist lames Lichatowich notes in his book Salmon without Rivers:

Historically, the Columbia produced more chinook and coho salmon and steelhead trout than any other river in the world.... Though all five species of salmon spawned in the Columbia river, the royal chinook was by far the most abundant. About 8 to 10 million Chinook entered the river each year. Many of them, especially the "June hogs" of the summer run, weighed in at fifty to sixty pounds each. (29)

Today, returning salmon average one-tenth of historic levels; as few as two hundred thousand salmon have returned in some years. (30) The current decline in salmon can be attributed to the impact of hydroelectric dams, irrigation projects, overharvest, and overall habitat loss. (31) Moreover, the development of water resources has fueled the expansion of globalization. After World War II federal agencies and private companies constructed eight large dams in the Nimiipuu watershed of the lower Snake River, just a few of the more than four hundred dams erected in the entire river basin. The control of water, in sum, enabled a global-scale society to support large urban populations, increase industrial output, and raise the production, consumption, and export of agricultural commodities.

The dams also make the inland rivers of the Pacific Northwest important transportation corridors to world markets. Wheat growers ship commodities downstream on the Snake and Columbia Rivers via barges, while agricultural inputs such as petroleum fuel and chemical fertilizers move upstream to production centers. China consumes over 90 percent of the wheat produced within the boundaries of the Nimiipuu Reservation. None of the wheat producers are Indian. The Nimiipuu have lost much of their land to support this agricultural production. (32)

"Sovereignty in salmon" means that the Nimiipuu never expressly surrendered the right to fish at all their usual and accustomed places, a right that was retained by the Nimiipuu in signing the 1855 Treaty with the United States. However, measurable declines in salmon and water are immediate dangers to Nimiipuu rights and the Nimiipuu's way of life. Effective adaptation to such changes requires long-term action by Nimiipuu leaders to ally with non-Indigenous peoples to strengthen and improve a common place and a common watershed.

Nimiipuu partnerships with federal and state agencies and nongovernmental organizations like the Nature Conservancy, Sierra Club, Idaho Rivers United, and Idaho Conservation League serve as examples of Nimiipuu leadership and the adaptive capacity to create mutually beneficial partnerships. Moreover, problems of this magnitude are culturally mediated and are solved best using cultural solutions, such as those asserted by the Nimiipuu in the stewardship of salmon in reactive yet unexpected ways. For instance, Nimiipuu adaptive strategies include hard-fought capital-driven processes like treaty-based litigation and coming up with innovative environmental solutions of implementing Nimiipuu knowledge of ridgetop to ridgetop watershed protection and restoration for rearing and spawning habitats and the protection of water quality. Nimiipuu strategies, in turn, safeguard critical water resources and sustain development in an unpredictable setting that is very different from what they have ever known as a culture.

LEADERSHIP IN PREPARING FOR AN UNCERTAIN FUTURE

In adapting to change, including the impacts of contact, colonization, and the acceleration of globalization in the twentieth century, the Nimiipuu are developing alternative systems to external policies of assimilation and global-scale development. Nimiipuu salmon management utilizes Indigenous knowledge systems, including those that "think like a salmon" to fashion current and informed policy making and to restore and implement those decisions in their homeland.

Nimiipuu cultural adaptation in areas where salmon runs to their traditional lands are 2 percent of their historic levels may also have the capacity to countervail the negative effects on salmon-related resources. Drawing on the doctrine of reserved rights and the Treaty of 1855, the Nimiipuu operate several natural resource programs, including a well-established fisheries program. (33) In this regard, the Nimiipuu have adaptive capacity. Thus, to have survived for more than four hundred generations in the face of globalization, climate change, and nonnative habitat modification, they must have retained strong elements of adaptive capacity throughout this period. Moreover, the Nimiipuu use sovereignty to shape a vigorous future economy where Indigenous management fits their own circumstances and their own culture.

A primary goal of Nimiipuu Fisheries is to recover and restore all species and populations of anadromous salmon and related habitat in the Nimiipuu homeland. In collaboration with the Columbia River InterTribal Fish Commission (CRITFC), Nimiipuu Fisheries provides scientific, technical, and policy inputs to protect reserved rights in salmon and water at all "usual and accustomed places" in the Columbia River drainage. The Nimiipuu operate seven fish hatcheries, located both on and off the reservation. Some of their fish culture interests and practices derive from their horse-breeding activities, developed in the preceding three hundred years. They monitor the harvest of Nimiipuu fishermen in the Columbia River drainage, as has always been the case. The Nimiipuu, along with other Columbia basin treaty tribes, provide recommendations for the protection and restoration of critical habitat for salmon populations listed under the federal Endangered Species Act in their plan called Wy-kan-ush-mi Wa-kish-wit (The spirit of the salmon).

For example, economics, trade, and religious expression tied to salmon were alive during the presettlement era, and those same relationships are evident today. Wy-kan-ush-mi Wa-kish-wit

applies Nimiipuu tribal values of environmental knowledge, leadership and governance, and sovereignty in the management of salmon and thus outlines several key variables:

Salmon are part of our spiritual and cultural identity; over a dozen longhouses and churches on the reservations and in ceded areas rely on salmon for their religious services; the annual salmon return and its celebration by our peoples assure the renewal and continuation of human and all other life; historically, we were wealthy people because of a flourishing trade economy based on salmon; for many tribal members, fishing is still the preferred livelihood; salmon and the rivers they use are part of our sense of place; the Creator put us here where the salmon return; we are obliged to remain and protect this place; salmon are an indicator species: as water becomes degraded and fish populations decline, so do the elk, deer, roots, berries, and medicines that sustain us; as our primary food source for thousands of years, salmon continue to be an essential aspect of our nutritional health; because our tribal populations are growing (returning to pre-1855 levels), the needs for salmon are more important than ever; the annual return of the salmon allows the transfer of traditional values from generation to generation; without salmon returning to our rivers and streams, we would cease to be Indian people. (34)

Consultation between Columbia basin tribes and federal agencies results in federal courts issuing biological opinions for the survival and recovery of listed salmon species from a federal action that is a direct or indirect alteration of critical habitat. In turn, Nimiipuu leaders have generally opposed large dams and other water development projects that negatively impact salmon, water, and related habitat.

Water is a central concern in contemporary Nimiipuu policy. In 2005 the Nimiipuu formed an agreement between non-Native water users, the Idaho State Senate, and the US Congress in the Snake River Basin Adjudication (SRBA), a water rights case introduced in 1986 to settle more than 150,000 outstanding claims to water in the Snake River drainage. The Nimiipuu, in turn, drew from their cultural connections to salmon and water and formed an agreement in which the Bureau of Reclamation may lease up to 427,000 acre-feet of water from the state to increase flow augmentation in the Snake River drainage and help endangered salmon. Additional water will flow down the Snake River, aid salmon migration, and improve Nimiipuu fish and habitat projects. Nimiipuu thus use reserved rights, self-determination, and autonomous self-governance in strengthening their Indigenous culture and homeland from the internal and external conflicts of more than 150 years of commercial development.

In 2008 federal officials with the Bush administration and Bonneville Power Administration reached an "agreement" with some Columbia basin tribes. The Nimiipuu refused to sign. Those signing the agreement, known as the Columbia Basin Fish Accords, included the Colville Confederated Tribes, Confederated Tribes of the Umatilla Reservation, Confederated Tribes of the Warm Springs Reservation, Shoshone-Bannock Tribes, and Yakama Nation. Moreover—the distinction between "agreement" and "settlement" requires some clarification, because the term "settlement" connotes litigation, and those tribes that actually signed on to the "agreement" were never parties to any litigation.

Furthermore, the Columbia Basin Fish Accords commit the Bonneville Power Administration to fund tribes with more than \$900 million in ratepayer monies. In turn, the accord tribes are using the money to aid in habitat restoration and hatchery improvements for salmon. Also, some of the funds are allocated to federal agencies to serve as capital for the construction of additional spillway weirs and screens on some dams located in the Columbia basin in an effort to protect fish. (35) It is ironic, however, that the agreement also commits participating tribes to agree to not publicly oppose the government's operation of dams or advocate publicly for their removal for a ten-year period from 2008 to 2018. The Nimiipuu show their leadership by not following the majority of tribes and declining to sign the agreement, showing that they have maintained for themselves a base of power, with leaders stating that "they want to keep their options open to press for breaching the four lower Snake river dams." (36)

Future challenges to the Nimiipuu and the environment are related to the impacts of climate change and its associated impacts on salmon and water resources. Nimiipuu leaders tried to start the process of adapting to climate change with novel and innovative policies. (37) Adjudicating water rights for salmon is a powerful tool in an environment of increasing demands and declining supplies. The Endangered Species Act is a valuable legal strategy for the Nimiipuu in aiming to protect salmon populations from extinction, and additional legal structures, such as contract law, may provide another means by which the Nimiipuu might attempt to secure in-stream flows to protect migrating salmon. Furthermore, in the protection of salmon, Nimiipuu policies aim to designate off-reservation landholdings as public lands in national parks and monuments and in wild and scenic rivers.

The Nimiipuu also engage in the formation of intergovernmental and intertribal cooperation, resulting in the CRITFC and other collaborations with various federal agencies such as the National Oceanographic and Atmospheric Administration (NOAA) and the National Fish and Wildlife Service (NFWS). In salmon restoration these partnerships are effective in comanaging hatchery programs and in developing longrange management strategies. In turn, the Nimiipuu have developed and implement strong policies on the future of dams and related irrigation projects. For instance, the Nimiipuu use their political power to force dam operators to release more water when needed to improve fish passage and, when necessary, litigate for the decommissioning of dams.

Innovative Nimiipuu adaptations to the mitigation of climate change includes on- and off-reservation carbon sequestration. The Nimiipuu have committed to twenty-nine forest restoration projects and about five thousand acres to carbon sequestration, and plantings of Douglas fir and ponderosa pine saplings are projected to absorb a year's worth of carbon dioxide from nearly five hundred thousand cars, trucks, and SUVs. (38) Moreover, the Nimiipuu aim to have corporations offset their greenhouse gas emissions by paying to keep trees growing and for forests to remain intact. Few American companies are presently mandated to curb greenhouse emissions with carbon sequestrations, but Nimiipuu adaptive strategies are models that demonstrate for others that the real value in forests is to keep them alive and in place.

CONCLUSION

So what do salmon, their life cycle, and the Nimiipuu people who depend upon them tell us about the capacities for survival? This article began with the assertion that "sustainability" as it is most commonly used may represent a faulty concept—meaning that nothing is forever and that change is the constant narrative. Also argued is the idea that the Nimiipuu have always had adaptive capacity and that Nimiipuu culture is the strength from which adaptive capacity emerges. Thus, Nimiipuu survival has not sustained some condition that existed before the many changes the Nimiipuu have experienced, because change, from external as well as internal forces, has been the unifying variable as long as Nimiipuu and salmon have coexisted. In all outward respects the Nimiipuu existence is very different in the twenty-first century from what it was in the eighteenth or nineteenth century. However, the basic premise of "sustainability" can be said to be applicable to the future of salmon and Nimiipuu culture in that "a sustainable system is one which survives or persists" but the state of the Nimiipuu system bears little resemblance to past states. (39)

Regarding Nimiipuu sovereign relations, salmon are a critical natural and cultural resource for which countries, individuals, and global actors compete. Salmon, too, represent resources that are becoming increasingly more scarce, and their shortage often leads to disagreements and conflicts between nation-states, sovereign tribes, and the global system. But to the Nimiipuu, salmon and water are the indicators of a healthy environment. Salmon, now threatened by contemporary northwestern society, have persisted in the Pacific Northwest for millions of years. (40) Thus, adaptive capacity for the Nimiipuu requires the power and resources to act to protect salmon and water and to use new technological and legal tools to adapt to changing environmental conditions. In short, the Nimiipuu develop trust and partnerships, recognizing that they cannot adapt without partnering and gaining power with others.

Moreover, Nimiipuu adaptive capacity is enhanced by a vision and worldview combined with the leadership to move toward that vision. Salmon migrate across many jurisdictions and scales and swim through many cultures and environments, linking complex social, political, and economic relationships. Salmon are inherently a resilient species, having adjusted to many different system states in the Columbia-Snake River system. (41) In the Pacific Northwest salmon populations have experienced past stresses related to natural disturbances, including episodes of glaciation, volcanism, and other catastrophic events. They survived, like the Nimiipuu, by having many independent groupings. Because of adaptive management, salmon and the Nimiipuu have survived and have shown the potential to colonize and recolonize rivers, including watersheds.

Nimiipuu adaptive strategies show us how people respond to periods of great change and how they reorganize themselves to cope with that change. In terms of Indigenous peoples, response to change and reorganization may be the least examined and understood factor in how resources are allocated, used, regulated, and managed. Salmon and Nimiipuu culture have had the adaptive capacity not only to absorb shocks but also to remain nimble and to take advantage of the opportunities that develop with change. They have persisted through several changes in system states.

NOTES

I need to acknowledge two sources of support and insight. First, my research has been supported by the Nez Perce Tribe, Cultural Resources Program, which presented me with a tribal research permit to conduct research on Nez Perce tribal peoples and programs. Second, conversations with Courtland L. Smith (professor emeritus of the School of Language, Culture, and Society and associate director of the Water Resources Graduate Program at Oregon State University) at a School for Advanced Research seminar that I sponsored with James E Brooks have greatly informed my thinking of adaptive capacity and change and how they apply to Nimiipuu people and salmon. Smith's forthcoming chapter, titled "Cultivating Capture Fisheries: Lessons from Indigenous Salmon Cultures," will appear in the seminar-sponsored book, Keystone Nations: Indigenous Peoples and Salmon across the Northern Pacific, edited by Benedict J. Colombi and James F. Brooks. The book is under contract with the School for Advanced Research Press, Santa Fe, New Mexico.

Education (SLIDE 16 - 21)

Nimiipuu have remained resilient by continuing to expand and detail their ancestral knowledge. There are many facets of education, first and foremost, knowledge that comes from tamálwit – Natural Law.

"Indigenous land-based education has implications for science, culture, politics, language, environmental stewardship, land rights, reconciliation – and the future of the planet." (Canadian Commission for UNESCO, 2021)

The understandings afforded through ancestral knowledge have withstood the test of time, colonization, and continues to remain adaptive, sustainable, and resilient. There are countless approaches to education which Nimiipuu engage with.

Traditional teachings from multiple aspects are experienced individually by Nimiipuu community members, based upon their unique positionality within the community and with their homelands. There are no experts, everyone is a learner, everyone is a teacher; the knowledge system is intimately intertwined and exceedingly diverse.

Education occurs through observation, listening to songs, prayers, and stories, through ceremony and socialization. Education is lifelong. There are cultural, informal, and formal approaches.

"Stories: Nez Perce stories imparted basic beliefs and [teach] moral values. Stories helped explain the creation of the world, the origin of rituals and customs, and the meaning of natural phenomena. Stories [are] a way of teaching children, promoting communication, and entertainment. They [are] normally told by the elders during the winter and during travel. These stories imparted upon children a moral framework and taught them such things as the habits and origins of animals, the location of food and other geographical features, how to use tools and weapons, and cultural traditions.

Stories that include Coyote make up the majority of Nez Perce stories. Because the Nez Perce believe that Coyote helped create them, he is very prominent in stories. Coyote is very complex in his nature and has a great capacity to survive. He represents many of the most basic human drives including lust, power and hunger for food. Coyote is often referred to as a trickster but in many of the stories Coyote is also the victim of tricks perpetrated by others. At times it was Coyote's greed, curiosity and lack of foresight which were blamed for human hardships such as childbirth, winter, and death.

Coyote isn't the only animal featured in Nez Perce stories. Horned lizard and sculpin were considered to be weather-changers and doctors. If the horned lizard was treated disrespectfully one should expect a return of winter at root digging time. It was believed that horned lizard could cure the ill or injured by blowing short puffs of healing breath. Rattlesnakes were also considered to be powerful doctors. Crayfish were not eaten because they too were doctors. Metallic wood boring beetles were thought to help in gambling. Cicadas are known as thirst-makers because of the hot summer days when the cicadas are making the most noise. Ticks and mosquitoes were thought to be cannibals, reduced at Coyote's command to pests that are wish us to this day.

Stories sometimes showed ecological relationships. One story tells of Golden Eagle and his five daughters. They come in order of size: first Kestrel, then Prairie Falcon, then Red-tailed Hawk, then Ferruginous Hawk, and finally, Osprey. Nez Perce stories scarcely mention the bald eagle. "Eagle" is always the prince of raptors, Golden Eagle.

Birds are important as signs. Swallows signal return of the spring Chinook salmon, while the oriole represents the rebirth of life in springtime. The canyon wren, said to attached and drive off rattlesnakes in defense of its rimrock nest, exhibits bravery in defense of home and family. Meadowlark's song give its flesh "medicinal" power to cure speech impediments, while Mourning Dove's heart is eater to make a person "quiet." Meadowlark also speaks to Indians, but in a teasing way. Ravens are powerful Indian doctors and messengers. Those with Raven's power can interpret the messages they bring of portentous distant events. Generally, Raven bears news of significance over long distances without the chill import of the Great Horned Owl's tidings. Conversely, talkative crows rarely say anything of significance, being given over to idle gossip. The raven is a more solitary bird partial to wilderness; the crow is gregarious camp-follower..." (Landeen & Crow, 1997)

The late elder, Horace Axtell shares his in his memoir about learning in the sweat house, which continues to be practiced today by many community members on a daily, weekly, monthly basis as a ceremonial and social practice.

"The Old Man: ever since I grew up using this sweat house I was always told that he is The Old Man. we call him *qiwn*, which means Old Man. the name for the sweat house is *wistitamo*. he was the wisest, most knowledgeable, strongest medicine man. He was the healer of broken hearts, aches and pains, and many things. We always referred to him as The Old Man – Wise Old Man. second people use this warehouse for preparing to go hunt, go fishing place that game, preparing to do most anything I learned so much in this warehouse. I was very small when I remembered first going into this White House. I just barely remember sweating with my grandmother and mother. The things I learned right from the start is keep your eyes closed, wait for the older man or elder lady to take care of the water, and listen to what they are talking about.

The Old Man was there all the time. Even when you left to go on a trip, he stayed home and took care of everything. He took care of your home, your sweat house, and watched over them. When we'd go on a journey comment the first thing we do was go visit The Old Man at the sweat house. We'd be happy to get back to The Old Man. He was there all the time.

Now this is what I learned from being at this sweat house. We would go there to see The Old Man to get wisdom. Whenever elders sweat, and whoever they sweat with, they tell the stories. They talk about their experiences. They give you advice. They teach you words. Anything. That's just the way it was in Nez Perce ways....

We were there for The Old Man, The One Who Is Wise. We were there to be with him, to get wisdom from him..." (Axtell & Aragon, 2000)

These teaching are alive and continue to demonstrate the resilience of the Nimiipuu. These teaching have continued for thousands of years. This way of life persists, and the adaptive capacity of the Nimiipuu remains just as prominent in today's society. Today the Nez Perce Tribe has multiple programs providing educational opportunities for the Nimiipuu community:

- The Nez Perce Tribe Education Department promotes the prosperity of the Nez Perce people through education and career pathways to self-sufficiency.
- The Career Center provides an array of education, training and employment services to youth and adults which includes partnership with education providers, ABE/GED, scholarship assistance for career technical education, short term workforce training and development.
- Mamáy'asnim Hitéemenwees -Early Childhood Development supports parents and their children, ages 5 and younger, in receiving high-quality early education.
- The Students for Success Program promotes student health and achievement by working to prevent substance misuse, chronic disease, and suicide prevention.
- Vocational Rehabilitation Services assist people with disabilities in finding and keeping employment and living independently.
- Higher Education Scholarship Program provides financial assistance for Nez Perce citizens seeking higher education. The program processes tribal scholarship funds for eligible tribal higher education students to support their academic or vocational technical programs.
 Expand student support services to assist current or future scholarship students to successfully enroll and complete post-secondary degree programs.
- State Tribal Education Partnership (STEP) project helps students excel by through culturally relevant teaching. Under this program, the Tribe collaborates with state educational agencies to enhance student experiences.
- Youth Mentoring Program provides college and career readiness mentoring for Native American boys in grades 7–12 who attend school on the Nez Perce Reservation.
- The Natural Resources Department (NRD) works to preserve the natural resources that have always provided for the Nimiipuu people.
 - The Cultural Resource Program: The mission of the Cultural Resource Program (CRP) is to promote the understanding and use of *nimiipuu'neewit* (traditional Nez Perce life-ways) as integral components of Tribal culture and regional management.
 - Environmental Restoration and Waste Management (ERWM): ERWM works to protect and restore Nez Perce cultural and natural resources in this area. Projects under ERWM include outreach to educate the public on Hanford issues, and support for Nez Perce college and high school students in developing careers in the STEM field

 Additional tribal programs that provide education and outreach include: Air Quality Program, Bio-Control Program, Forestry and Fire Management, Land Services, Water Resources, Wildlife Division, and Fisheries Resources Management.

There are various educational entities that are separate from the Nez Perce Tribe, but are owned and operated by tribal citizens, including Nez Perce Tourism (preserving our culture, identity and traditions while simultaneously creating jobs that spur the local economy and protect our sacred ecosystem), hipéexnu' kíi'u núun wisíix. inc. (to promote protect & revitalize the Nimiipuu language & cultural arts of life), and childcare facilities (i.e. Little Roots, Tiny Tots). There are also government agencies that have trust responsibilities to the Nimiipuu, including the US Forest Service (Nez Perce-Clearwater National Forest, Payette National Forest, Bitterroot National Forest, Wallowa-Whitman National Forest, Umatilla National Forest, St. Joe National Forest, Salmon National Forest, Lolo National Forest etc.), and the National Park Service (Nez Perce National Historical Park, Yellowstone National Park, Fort Vancouver National Historical Site, Big Hole National Battlefield, Bear Paw Battlefield, Nez Perce (Nee-Me-Poo) National Historic Trail, etc.) who also provide education and outreach for, by, with, and about Nimiipuu.

There are Nimiipuu doctors, educators, engineers, lawyers, chefs, artists, entrepreneurs, biologists, ecologists, nurses, dentists, authors, historians, ranchers, social workers, construction workers, filmmakers, politicians, foresters, poets, enterprise managers, budget and finance staff, grant writers, etc. Nimiipuu citizens hold PhD, Masters, Bachelors, Associates degrees and a wide variety of certifications, academic accolades, and educational endorsements.

Formally, Northwest Indian College (NWIC) is a tribal college with a extended campus (Nez Perce) in Lapwai and Kamiah, Idaho. NWIC is an accredited four year college guided by the mission, vision, and core values:

NWIC Mission Statement: Through education, Northwest Indian College promotes Indigenous self-determination and knowledge.

NWIC Vision Statement: We are committed to our students, the Tribes we serve, and advancing Tribal sovereignty for the protection and enhancement of our homelands and future generations.

NWIC Core Values:

- <u>Səla-exw</u>: Our strength comes from the old people. From them we receive our teachings and knowledge and the advice we need for our daily lives.
- Schtəngəxwən: We are responsible to protect our territory. This means we take care of our land and water and everything that is on it and in it.
- Xwləmi-chosən: Our culture is our language. We should strengthen and maintain our language.
- Leng-e-sot: We take care of ourselves, watch out for ourselves and love and take care of one another.

Xaalh: Life balance/sacred

NWIC is an important part of the Nez Perce community. The College offers a variety of educational programs to meet academic, vocational and cultural needs. The NWIC Extended Campus brings those programs conveniently into the community.

At NWIC-Nez Perce, students are encouraged to develop themselves and discover ways to contribute to their communities and families. They learn ways to understand and support the goals of the Nez Perce Tribe, especially in the areas of self-governance, as well as social and economic well-being.

Degree Programs Offered at Nez Perce:

- Bachelor of Arts in Tribal Governance & Business Management
- Bachelor of Arts in Native Studies Leadership
- Bachelor of Science in Native Environmental Science
- Associate of Arts in General Direct Transfer
- Associate of Applied Science in Early Childhood Education

Education in the Nimiipuu community is offered in diverse and dynamic approaches, providing holistic understandings of their culture, homelands, and community. The teaching are ancient and modern, address physical, social, mental, economic, environmental, and spiritual aspects. The Nimiipuu are wise, knowledgeable, adaptive, and resilient.



HOLISTIC UNDERSTANDINGS (SLIDE 22)

Watch Traditional Ecological Knowledge & Place-based Learning Communities

"Traditional environmental knowledge is a body of knowledge and beliefs transmitted through oral tradition and first-hand observation. It includes a system of classification, a set of empirical observations about the local environment, and a system of self-management that governs resource use. Ecological aspects are closely tied to social and spiritual aspects of the knowledge system. The quantity and quality of TEK varies among community members, depending upon gender, age, social status, intellectual capability and profession (hunter, spiritual leader, healer, etc.). With its roots firmly in the past, TEK is both cumulative and dynamic, building upon the experience of earlier generations and adapting to the new technological and socioeconomic changes of the present" (Dene Cultural Institute 1995 in English translation, quoted in Stevenson 1996: 281).

Video link: https://youtu.be/liKV74avPso

Task: Assigned as homework, students write a reflection on the role of FEMA and/or agency representatives in honoring Nimiipuu resilience.

Consider:

- Content from the video:
- The description of traditional environmental knowledge; and

 The longstanding practices of Nimiipuu resilience regarding climate, COVID-19, food sovereignty/security, and education.

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Appendix A. Cornell Notes Template

Video Title:	Scholar Name:	
	Date:	
	Notes/Definitions/	
Themes	Examples/Sentences	
Descriptions of the resilience of Nimiipuu with examples/quotes		
Examples of Nimiipuu relationships with spirit, air, fire, and land.		
Write a paragraph summary of the podcast focusing on the themes of resilience and sustainability:		

COVID-19 and Climate Change: Response	Understanding Place, Histo	ry, and Indigenous Sovereigr	ty in Emergency