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CULTIVATING MEANINGFUL CONSULTATION AND COLLABORATION: TRIBAL ENVIRONMENTAL PROTECTION IN MICHIGAN

Zachary Reed, M.S.

Western Michigan University, 2022

In the year 2022, there are 12 federally reaffirmed Native American tribes in Michigan. These tribes all maintain natural resource departments to manage tribal environments. Indigenous groups have a rich history of protection and understanding of the natural world. This connection to land and water has been systematically challenged through patterns of colonialism. Through policy making, revitalization efforts and environmental ethics, the State of Michigan has been improved by tribal natural resource departments. But, while the United States and the State of Michigan recognizes tribal sovereignty, meaningful tribal consultation is inadequate. Through collaborative interviews, historical sources, and contemporary evidence, this research examines how tribal consultation and collaboration can be improved. The Grand Traverse Band of Ottawa and Chippewa Indians, and the Little River Band of Ottawa Indians assisted throughout this research. Increased funding, clearer definitions, and respect of Indigenous spirituality will be paramount to improving tribal consultation and collaboration.

CULTIVATING MEANINGFUL CONSULTATION AND COLLABORATION: TRIBAL ENVIRONMENTAL PROTECTION IN MICHIGAN

by

Zachary Reed

A thesis submitted to the Graduate College in partial fulfillment of the requirements for the degree of Master of Science Geography, Environment, and Tourism April 2022

Thesis Committee:

Lucius Hallett IV, Ph.D., Chair Nicholas L. Padilla, Ph.D. Lisa M. DeChano-Cook, Ph.D.

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ACKNOWLEDGEMENTS

I thank all Michigan tribes for the trust and respect they have shown me which is reflected in their conservation practices. I am deeply thankful for the land ethic I have been taught, and the Seven Generation and Seven Grandfather Teachings. I especially thank the Grand Traverse Band of Ottawa and Chippewa Indians, and the Little River Band of Ottawa Indians, who participated closely with me during this project. I am deeply appreciative for my friends in Traverse City, including Tribal Elder Hank Bailey of the Grand Traverse Band of Ottawa and Chippewa Indians.

I am grateful for my Grandma Rosie, who I was fortunate to spend much time with over the past two years. Our Saturdays in Three Rivers helped ground me in Michigan. I thank my parents, Paul and Kim, without whom I would not have the ambition to pursue my degree. The immense support they provided me throughout my time in Kalamazoo and my entire life is something that humbles me, and I hope to be such a positive influence in others' lives. I am extremely grateful for my siblings and best friends Alex and Jenna. I thank Clarissa Stewart, Blake Lapoint, Matteen Aminpour, and the rest of my close confidants who supported me daily. I also thank Floyd WhiteEagle of the Ho-Chunk Nation of Wisconsin for friendship and speaking with me about this research.

I thank Elise Crafts, whose research this thesis is predicated on. I thank my committee members, Dr. Lucius Hallett IV, Dr. Lisa M. DeChano-Cook, and Dr. Nicholas L. Padilla, who served as amazing connections throughout my time at Western Michigan University. Thanks also goes out to the Graduate College, and the Department of Geography, Environment, and Tourism of Western Michigan University.

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1: Introduction

Indigenous people have a long history in the area now known as the State of Michigan, dating back to around 10,000 BCE (Cleland 1992, Fletcher 2012). The modern Anishinaabek (the Odawa, Ojibwe, and Potawatomi), have lived in the Great Lakes since between 600 and 900 years ago (Fletcher 2012). What existed as bands or groups of people evolved into the modern tribal organizations present today. Currently, there are 12 federally reaffirmed Native American tribes in Michigan (Michigan Department of Health and Human Services 2020, United Tribes of Michigan 2020). The 12 tribes include Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, Sault Ste. Marie Tribe of Chippewa Indians, Bay Mills Indian Community, Hannahville Indian Community, Keweenaw Bay Indian Community, Lac Vieux Desert Band of Lake Superior Chippewa Indians, Little Traverse Bay Bands of Odawa Indians, Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians, Nottawaseppi Huron Band of the Potawatomi, Saginaw Chippewa Indian Tribe, and Pokagon Band of the Potawatomi. Additionally, there are four state recognized tribes in Michigan who are currently fighting for federal acknowledgement. These Michigan tribes are Burt Lake Band of Ottawa and Chippewa Indians, Grand River Band of Ottawa Indians, Mackinac Bands of Chippewa and Ottawa Indians, and Swan Creek Black River Confederated Ojibwa Tribes of Michigan (University of Michigan 2021). Through generations of struggles to live in their homeland, these Indigenous people have continuously asserted their connection to and their protection of the land (Cleland 1992, Fletcher 2012).

There is a long history of dispossession and mistreatment of Indigenous people in the United States, and broadly (Lewis 1995). Indigenous groups in the U.S. historical and

contemporary struggles are reflected elsewhere, such as in First Nations in Canada and the Māori in New Zealand (Fox et al. 2017). The land and water which was so important to sustaining the lives of Indigenous people, also attracted colonizers to North America. While people became displaced from the land which sustained them, their connection and compassion for these places did not wane. Thus, this history of land dispossession is intimately connected to continuous efforts of environmental protection (Lewis 1995). There is a need for more education about Indigenous issues, both historical and contemporary. There are published sources which cover the history and distribution of Native American tribes in Michigan (Cleland 1992). Other sources cover tribes in Great Lakes states, with more specific focus on environmental efforts of each tribe (Loew 2013). Prior research at Western Michigan University has examined Tribal-State-Federal relationships, which found that while collaboration exists, a patriarchal dynamic persists (Crafts 2013). In a similar vein, this current research looks to further examine Indigenous protection of natural resources in the State of Michigan. To address these intertwining issues, what follows is a detailed account of Native American protection of Great Lakes natural resources- in the wider context of Indigenous environmental justice and structural constraints.

A primary objective of this research is to examine Native American history in Michigan and the Great Lakes Region to fully understand the relationship Indigenous people have had with the land and water. This involves using sources written about the history of the State to create a deeper understanding of specific points in history. While the nature of this research is necessarily broad in its analysis of Indigenous environmental experiences, the primary goal is to generate knowledge about tribal environmental protection in the State of Michigan.

An associated objective is to catalogue tribal environmental protection throughout the Great Lakes Region. Placing the Indigenous experience in Michigan in the broader Great Lakes Region grants the researcher flexibility in acquiring sources, and aids in the goal of creating a comprehensive understanding of Indigenous environmental experiences. Furthermore, the State of Michigan is a construct of the United States, of the hegemony which took control of the area and subjugated these inhabitants. Indigenous historical and contemporary relations transcend these sometimes-arbitrary, modern boundaries. At the broadest level, this research also examines Indigenous environmental protection across space and time, including examples to illustrate the many diverse efforts and ethics expressed by Indigenous communities worldwide. While this research is broad, I acknowledge there is a biased focus on the Grand Traverse Band of Ottawa and Chippewa Indians and the Little River Band of Ottawa Indians. The history and treaty sections more specifically reflect these tribes' experiences, but this does not overlook the immense strides and struggles experienced both by tribes in Michigan and elsewhere.

Tribal natural resource management in Michigan is indicative of a larger pattern of Indigenous ethics and environmental protection (Lewis 1995). Every tribe in Michigan has natural resource or environmental departments, for purposes of simplicity these will mostly be referred to as natural resource departments, except when referring to a specific environmental department. Tribal environmental programming in Michigan is highly developed and tailored for the needs of individual tribes and the State. While tribal environmental protection seeks to protect tribal land and the resources of tribal members, in doing so this also helps the broader community and provides example for State, Federal and local organizations in the management

of resources and the preparedness for climate change. Collaborations already exist between State, federal, and non-governmental organizations (NGOs), but tribal communities remain on the cutting edge of natural resource management in their commitment to the future with lessons from the past. Adapting to and circumventing the negative impact of climate change, invasive species, and other anthropogenic environmental concerns, are all issues tribes are uniquely prepared to handle (Nelson et al. 2018, Manoomin Workshop Proceedings 2021). In their expertise and connection to traditional as well as modern forms of science and knowledge, these tribal natural resource departments serve as the greatest hope for the future of the natural world and by extension human society (Nelson et al. 2018).

In an effort to be transparent and honest, I will here acknowledge my own positionality. I am a white male who grew up in Eau Claire, Wisconsin. I lived and learned on land traditionally occupied by Ojibwe, Ho-Chunk, and Dakota Nations. I currently study at Western Michigan University, on the territory of Ojibwe, Odawa, and Potawatomi Nations. Growing up I lacked meaningful knowledge about the colonial past and present struggles of Indigenous tribes in the United States. Through education from some great professors, tribal members, and personal research, I began to understand this history that has been purposely kept in the dark for so long by powers that be. Perhaps this research can be a gesture of respect for these oversights. I have much more to learn from the amazing tribes that made this research possible, and I deeply appreciate the love I have been shown.

2: Background Information

In this section, I explore the background of Indigenous peoples in Michigan. The section follows the following format: I first explore the culture and history, especially legal history, of tribes in Michigan providing an important context for the present-day situation. *Rites of Conquest: The History and Culture of Michigan's Native Americans* (1992) by Charles E. Cleland is a book that specifically examines Indigenous history in the State of Michigan. Written by a professor of anthropology, this is a good source for information on the historical and cultural experiences of Native Americans in Michigan since before colonization. While Cleland's book is an in-depth examination of the history of Michigan tribes, it is appropriate here to emphasize the importance of the Indigenous perspective when studying Indigenous issues. Tribal sources and Indigenous scholars were referred to as much as possible through the course of this thesis to try to fully include this perspective. For this reason, the following section relies largely on *The Eagle Returns: The Legal History of the Grand Traverse Band of Ottawa and Chippewa Indians* by Matthew L. M. Fletcher (2012), a member of the Grand Traverse Band of Odawa and Chippewa Indians.

Treaty History

The following discussion covers some of the most important treaties for Michigan tribes. Treaties were utilized early on by the United States and European nations to negotiate with Indigenous people in the Americas to secure settler land rights and minimize conflict between settlers and Indigenous peoples. Early treaties by the United States were negotiated between

the federal government and Indigenous tribes. Later, treaties would drastically reduce the land base of tribes in Michigan and throughout the United States (Public Information and Education Committee 1999).

As an example, "Prior to 1808, tribal groups in Michigan inhabited most of the 57,000 square miles that comprise the state. By 1864, tribal lands amounted to only 32 square miles of Michigan, the rest ceded in treaties with the United States government" (Public Information and Education Committee 1999: 12). The loss of Indigenous lands was simply astonishing, and it opened these territories for settlement and development by European settlers. The consequences for Indigenous environmental governance have been similarly profound as Indigenous peoples were separated from the landscapes on which their traditional knowledges emerged. The diversity of Indigenous tribes was also significantly reduced as the United States federal government intensified its territorial expansion through the Indian Removal Act of 1830 (Low 2006).

The Potawatomi in Michigan signed more than 30 treaties with the U.S. From 1816 to 1833. The final and perhaps most significant Potawatomi treaty was the 1833 Treaty of Chicago (Low 2006). This treaty was negotiated by Leopold Pokagon, who ensured a home for the Pokagon Band to remain in Michigan, in contrast to other Potawatomi bands which faced removal west. While Pokagon secured lands centered around Dowagiac, other bands were subject to removal west on the Trail of Death. This is one example of the atrocities committed against tribal nations by the federal government.

Specific treaties between tribes and the federal government ended up being much more pivotal than others. The 1836 Treaty of Washington formed the basis for current hunting and fishing rights in the ceded territory of Michigan (Sault Tribe 2017a). The Treaty of 1836 ceded much of northern Lower Michigan and the eastern Upper Peninsula to the United States (Great Lakes Indian Fish and Wildlife Commission [GLIFWC] 2018). In total, the Treaty of 1836 ceded about one-third of the current State of Michigan and was negotiated by bands of Ottawa and Ojibwe communities in the region (Fletcher 2012). The Treaty of 1842 is another land cession treaty for Michigan because it ceded lands in the Western Upper Peninsula (GLIFWC 2018).

The years leading up to the 1836 Treaty had some Anishinaabek hoping to sell lands, while others were very opposed to this. Thomas Jefferson had the atrocious idea for traders to offer credit to people to extort land cessions. Treaties offered a way out of this accumulated debt. Another reason for the 1836 Treaty was a federal cut in the Indian Office budget by Andrew Jackson, a decision that would remove blacksmiths and other resources from the Anishinaabek economy (Fletcher 2012).

Henry Schoolcraft was the head treaty negotiator for the United States at this time. While the Anishinaabek believed the 1836 Treaty would largely impact the Lower Peninsula of Michigan, Schoolcraft and others hoped for a much larger land cession. The Upper Peninsula Chippewa people were not well represented at the treaty, but this did not matter to Schoolcraft or to the federal government, who only wanted more land by any means possible. Twenty-four representatives from Michigan attended the treaty negotiations in Washington. After Schoolcraft manipulated negotiations by pitting the Lower Peninsula Ottawa and Chippewa

people against the Upper Peninsula Chippewa who were more favorable to negotiations, the delegation agreed to sign the treaty.

While these treaties were signed this did not necessarily mean they had widespread support across Michigan tribal communities:

"Surely, the American treaty commissioners wanted to limit the presence of people who could influence the Indian negotiators, and to place the Indians in an uncomfortable position, but the presence of so few Anishinaabe leaders demonstrates the lack of consensus—and consent—from the Anishinaabek as a whole to the large land cession" (Fletcher 2012: 21).

An important part of the 1836 Treaty is Article 13. Article 13 reserved hunting, fishing, and gathering rights on the ceded territory (until the land was required for settlement). This formed the basis for the modern tribal rights in the ceded territory. As the Anishinaabek understood it then, the requirement for land settlement would have been for productive, agricultural land (Fletcher 2012). This is in contrast to the vast development of unproductive land for human settlement and other activities seen today in Michigan – something the Anishinaabek and others would not have anticipated in 1836. As it was understood in 1836, most of this land would likely still be reserved for Anishinaabek use (Fletcher 2012). In addition to the assurance of hunting, fishing, and gathering rights, the 1836 Treaty also established various reservations (Fletcher 2012). These reservations were then limited to five years in a unilateral decision by the U.S. Senate (Fletcher 2012).

The 1855 Treaty of Detroit was the next major treaty for the region. These negotiations included delegations from bands of Sault Ste. Marie, Mackinac, Grand River, Grand Traverse, and Little Traverse Indigenous populations. The U.S. position in these negotiations was to create a land allotment program for the Anishinaabek and continue to try to pressure them into

the mainstream U.S. culture. The Anishinaabek held a firm stance and asked for past due annuities, which were turned down. After much pressure, the U.S. goals, including the allotment program succeeded. Much like the 1836 Treaty, the 1855 Treaty was characterized by manipulation, with certain provisions left untranslated and uncommunicated for the Anishinaabek (Fletcher 2012).

"What is clear from the historical record of the 1855 treaty negotiations was that the federal government's negotiators came to the treaty council with a clear idea of what they wanted in the treaty, ignored most of the demands of the Anishinaabek while appearing to negotiate and compromise, and finalized the treaty by including little of the negotiated compromises" (Fletcher 2012: 50).

The 1855 Treaty left the Anishinaabek in Michigan increasingly under stress. The years that followed proved rough with an increasing strain on resources. From 1855 until federal reaffirmation at end of the twentieth century, many tribes in Michigan lacked any sort of federal or State assistance (Fletcher 2012).

At the end of the twentieth century, tribes in Michigan were affected by a new set of official rulings. After a series of legal battles, the five tribes that comprise the Chippewa Ottawa Resource Authority were officially affirmed in their rights to hunt and fish on off reservation land. The first consent decree was the 1985 Consent Decree, which is also called the Great Lakes Consent Decree. This was renegotiated in 2000, and again starting in 2020 (Great Lakes Now 2021). An Inland Consent Decree was negotiated in 2007 and covers hunting and fishing in the inland portions of Michigan (United States Department of Justice 2015, Michigan Department of Natural Resources 2017).

Neocolonialism

In light of the ongoing efforts to dislocate and erase Indigenous experiences from academic inquiry, this section now looks to how Indigenous peoples continue to be actively excluded from society at large. Neocolonialism refers to the continued effects of settler colonialism, specifically in how power dynamics still work to suppress and control nations and populations. Indigenous individuals and communities still live in their historical territories, yet they have been alienated from these spaces and exist within a legal structure that denies their legitimate claims to land. This connects to the way tribal entities and other former dependencies have been continuously treated by the federal government (Steinman 2012).

Prior research points out the problematic use of geographic information systems (GIS) by the U.S. Bureau of Indian Affairs (BIA) (Palmer and Rundstrom 2012). Geographic tools, like maps, have been used as instruments of colonization since its inception. Early GIS efforts by the BIA focused on timber extraction efforts and neglected to collaborate with other tribal interests. It is important to note that these authors do mention the positive use of GIS by tribes, for example, the independent GIS research many tribes operate, which supports autonomous environmental governance.

The United States federal government and sovereign Native American nations have had an adversarial relationship since the colonization of North America. Konkle (2008) argues in "Indigenous Ownership and the Emergence of U.S. Liberal Imperialism" that this relationship is one of ongoing imperialism. This is a useful source for background and theory about Native American and U.S. government relations.

Leonard et al. (2020) examines the effect land quality has had on Indigenous wealth and ownership. These authors write that European colonizers were attracted to quality agricultural land, leading them to seek out the best land which was already settled by Native Americans. Data on land and natural resources is used to determine that reservations containing the highest quality land were allotted the earliest, leading to their privatization. Their research illuminates how the processes of colonization continue to affect Indigenous peoples today, having been relegated to land that is less productive, and less valuable.

This section outlined some of the background and history concerning Indigenous peoples in the United States, along with some context about researching with Indigenous peoples, and the specific geography of Michigan. Additional background information may be required to understand the complex history of Native Americans in the United States. The next section examines more specifically the many positive examples of Indigenous protection of natural resources.

Indigenous Protection of Natural Resources

Indigenous protection of natural resources is a major focus of this project and there are numerous examples to illustrate this widespread environmental protection. But there are only a few sources specific to Michigan and the Great Lakes. In addition, understanding the broader pattern of Indigenous protection of natural resources across the world is important. This is relevant because it shows a pattern that is followed by many Indigenous groups, and points to answers to questions modern society seems ill-equipped to answer. Following this line of

thought, this section of the Background Information will explore a wide range of environmental protection efforts by Indigenous people.

It is important to understand some Indigenous experiences within the Great Lakes Region, and on a global scale. There are books and articles by scholars which contain extensive information on Indigenous experiences in different Great Lakes states. It is also very important for this research to include literature from Indigenous sources and scholars. Indian Nations of Wisconsin: Histories of Endurance and Renewal by Patty Loew (2013) specifically covers the history and culture of Wisconsin tribes. Loew is a member of the Bad River Band of Lake Superior Ojibwe. Loew's more contemporary work devotes a chapter to each tribal nation, with much attention on the environmental protection initiatives of each tribe. Understanding the similarities and differences between Wisconsin and Michigan tribes also provides a deeper understanding of the environmental programming being studied. Environmental protection initiatives exist in Wisconsin as well as Michigan, and the connection of the Great Lakes and other environmental and tribal connections make understanding these various geographies important. Furthermore, Wisconsin, Michigan and other states are functions of the oppression of the federal government which cross tribal land in various ways. Just because a state line is drawn does not mean a resource, relationship to the land, water, or other tribal entities stop. Figure 1 displays how EPA Region 5 includes Michigan, Wisconsin, and Minnesota to help manage tribal environments (EPA 2012).

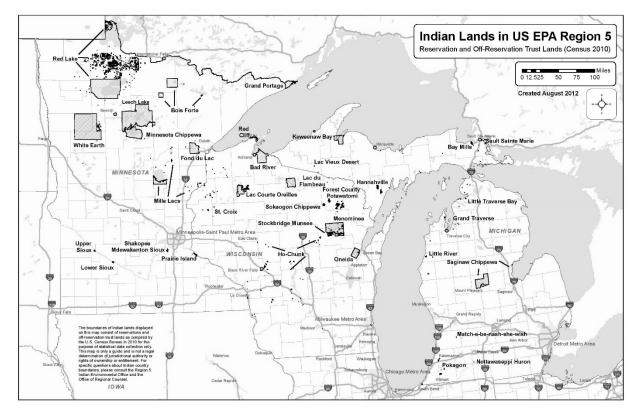


Figure 1: A map of tribal land in EPA Region 5: Michigan, Wisconsin, Minnesota (EPA 2012).

According to Loew, the Ho-Chunk Nation of Wisconsin is one example of a Great Lakes Tribe who shares environmental ethics and connection to the land with Michigan tribes. As early as 1788, settlers were exploiting Ho-Chunk lands for lead mining. Later, areas of their land, including the Dells of the Wisconsin River became ecotourism attractions. What started as ecotourism and land exploitation turned into a developed city filled with water parks, Wisconsin Dells. Despite the negative impacts on their land and society, the Ho-Chunk maintained their culture and also actively participated in tourism in the region (Loew 2013).

Today, the Ho-Chunk Nation operates a wide variety of enterprises and contributes greatly to the environmental health of Wisconsin. The Ho-Chunk reintroduced herds of bison to Wisconsin, and still maintains membership to the Intertribal Bison Cooperative. While these bison herds were sold, it still remains an area of interest for the Tribe (Loew 2013). The Ho-Chunk Nation monitors air quality in indoor and outdoor settings. One major issue and reason for establishing air quality stations is due to large frac-sand mining that operates on their traditional lands and other places in Wisconsin. These operations damage air and have other detrimental environmental effects (Region 5 Tribes 2019). These examples are some of many environmental and social contributions the Ho-Chunk Nation has made to the region.

Lewis (1995) provides a broad overview of Native American environmental issues through the 20th century. This study systematically explores different issues such as agriculture and ranching, and forests and watersheds. Other publications specifically survey water resources relevant to certain tribes (U.S. Department of the Interior, U.S. Geological Survey. Prepared in cooperation with the Nottawaseppi Huron Band of Potawatomi Indians. 2004).

Awume et al. (2020) uses semi-structured interviews with Indigenous people in Saskatchewan to discuss water. These researchers write about five distinct themes as a holistic understanding of these people's relationship with water. Their five themes include "water as a life form, water and the spirit world, women as water-keepers, water and human ethics, and water in Indigenous culture" (Awume et al. 2020: 1). Their research is informative about Indigenous-specific understandings about water, and it emphasizes the importance of the Indigenous perspective. It also covers some of the issues Indigenous people face in accessing quality water.

Cantzler and Huynh (2016) examine Native American environmental justice issues in the Pacific Northwest. Their study is unique in that it frames environmental protection efforts in a context of decolonization and resistance. This study specifically looks at tribal fishing rights in

Washington State, examining the Boldt Decision pivotal to Indigenous treaty rights. The Boldt Decision (*United States v. Washington 1974*) affirmed fishing rights for fourteen tribes in the State of Washington, guaranteeing right to harvest 50% of fish in the State. These struggles for fishing rights in the Pacific Northwest are reflected in similar struggles in the Great Lakes Region (Cantzler and Huynh 2016).

Collaborative environmental protection efforts between federal governments and sovereign Indigenous nations are another important example of environmental protection. Jurney et al. (2017) examines programmatic agreements between Ozark-St. Francis and Ouachita National Forests and local tribes that aid in forest management. While these programmatic agreements seek collaboration in sustaining the national forests of Arkansas and Oklahoma, these researchers also point out that these endeavors can promote trust and traditional ecological knowledge.

Other work studies Indigenous involvement in source water protection in the U.S. and Canada. Marshal et al. (2018) studies the minimal involvement Indigenous communities have in source water protection programs. Their research also outlines Indigenous communities that are involved in these efforts and emphasizes the importance of these communities as stakeholders.

Greetham (2018) studies water planning collaborations between tribes and the states of California, New Mexico, and Oklahoma. This study addresses tribal water claims and water rights with focus on the water planning collaborations. Greetham suggests that collaborative water planning can possibly lead to future positive engagement and conflict resolution.

It is clear from these examples that Indigenous peoples have an ongoing concern for natural resources, across time and space. These examples of water and land protection by Indigenous groups seem to consistently appear among many different groups. Still, it is important to note that all experiences are unique, and no two group's experiences with environmental protection will be the same. This section of the Background Information detailed Indigenous protection of natural resources. The next section will cover traditional ecological knowledge.

Traditional Ecological Knowledge and Spiritual Practices

Indigenous spirituality and traditional ecological knowledge are intrinsically connected to place, space, and landscape. Sacred sites make up a piece of broader spiritual practices. Much like traditional ecological knowledge and environmental ethics, spiritual values are not exactly the same across all Indigenous groups. By examining multiple examples of spirituality and knowledge, we can see how a connection to sacred sites and traditions do have similarities across different geographies.

Barclay and Steele wrote: "One commonly found cultural value is a sense of place and belonging as a fundamental element of Indigenous identity. A closely related attribute is that there are particular locations that are integral to Indigenous spirituality — sacred sites. Therefore, it is not enough to say that certain sites are regarded as sacred. For many native peoples, they are people of a particular place, and their particular homelands and landscapes are inextricably tied to their identity as peoples" (2021: 1304).

The Potawatomi continued spiritual practices such as vision quests, naming ceremonies, songs, and dances. Additionally, the use of sacred items is somewhat consistent across multiple tribes in Michigan, including tobacco, cedar, sage and sweetgrass (Low 2006).

Traditional ecological knowledge is an important concept to understanding Indigenous environmental ethics in Michigan and elsewhere. Traditional ecological knowledge (TEK) encompasses a wide range of thoughts and practices connected to Indigenous environmental wisdom. While TEK exists in many Indigenous tribes in the U.S. and elsewhere, it is completely wrong to think this wisdom is completely uniform across this vast geography. "Hundreds of tribes exist in the United States alone, not to mention the many Indigenous peoples around the globe, with their own views about their relationship to nature. It is dangerous to essentialize the "Indian view" about any subject matter" (Nelson et al. 2018: 111).

While it is incorrect to lump all Indigenous environmental worldviews into one category, similarities do exist. In her writing, Joan McGregor summarizes Ronald Trosper's articulation of TEK, which includes a community of all beings (including humans, plants, and animals), the interconnectedness of all things, the Seven Generation Teachings, and the practice of humility (Nelson et al 2018).

McGregor juxtaposes the difference between western, universal view of ethics with a more communal and traditional view. While some ethical codes are developed as almost academic undertakings, serving as abstract rather than practical representations of reality, TEK arises from real relationships and responsibilities to the world around us (Nelson et al 2018).

"TEK does not appeal to abstract universal moral principles of justice or universal welfare for conclusions or prescriptions for action. Instead, it relies on an understanding of how the complex interdependent relationships we have with other human beings,

animals, and the land (being connected and thereby in a community with them) generates a web of responsibilities to those entities" (Nelson et al 2018: 119).

Verbos and Humphries (2013) provide additional context for the unique experiences of Native Americans by examining the Seven Grandfather Teachings and its incorporation into Native American ethics. The Seven Grandfather Teachings refers to the values of love, respect, honesty, courage, wisdom, humility, and truth. Sometimes, the term bravery is used in place of courage (Sault 2017b, Verbos and Humphries 2013). "The Seven Grandfather Teachings are instructions about the foundational values that make up our relationships with each other and the natural world" (Verbos and Humphries 2013: 2). Verbos and Humphries (2013) juxtapose the Seven Grandfather Teachings with the analytical and economic worldviews. While mainstream society and the economy is built on the idea of forward progress by economic measures or getting ahead on a personal level, the Seven Grandfather Teachings outline an entirely different way of being. Instead of self-motivated and economic interest, the Seven Grandfather Teachings are a framework for *doing the right thing*.

The Seven Grandfather teachings are very common across Michigan tribal ethical systems (Low 2006, Sault Tribe 2017b, Fessell 2021, SCIT 2021). The incorporation even reaches specific restoration projects undertaken by the tribes. For instance, incorporation into the Boardman-Ottaway River restoration project underscores the value that these teachings have to a large community project (Fessell 2021). The use of values such as courage in citizen engagement, and love as a part of watershed planning are a real part of this collaborative restoration (Fessell 2021). With consistent respect of the Seven Grandfather Teachings, the collaborative removal of dams on the Boardman-Ottaway River was possible. It is important to

understand broad trends in Native American ethics to see how these patterns of environmental protection and other ethical concerns arise.

There is another set of teachings within Indigenous populations, namely the Seven Generation Teachings. The Seven Generation Teachings refers to the thoughtful practice of taking into account multiple generations of descendants and ancestors. Kyle Whyte discusses the Seven Generation Teachings in a comprehensive work previously referenced (Nelson et al. 2018). Whyte remarks that the Seven Generation Teachings can mean three generations past, the generation in the present, and three future generations; but it can also refer to seven generations into the future (Nelson et al. 2018). Looking at the world through the lens of multiple generations aids in decision-making processes and care for people and all living beings, including the life force inherent in water and land.

The Seven Generation Teachings support a long-term view of the world that seeks to use lessons from the past to solve problems, while also considering the effects our actions have generations into the future. The seven values that comprise the Seven Grandfather Teachings form the basis for a worldview that emphasizes responsibilities and interconnectedness of all things. Together, these teachings help form an ethical system that may seem very different from western conceptions of reality. Still these Indigenous knowledge systems could be applied to many of the problems facing society at large. More on this specific knowledge and wisdom is covered in the Interviews section.

Tribal Consultation

Tribal consultation encompasses the processes of federal government and other entities in their notification and discussion of issues that affect specific Native American tribes. Tribal consultation practices and standards differ among different U.S. federal and state agencies. While at times consultation can be successful in actively incorporating Indigenous needs and perspectives into projects, failure or complete lack of consultation is also common. The spectrum of the power of consultation can also vary from complete absence to something that essentially constitutes a "veto power." Consultation can go both ways as well, sometimes originating in federal notification of an issue, or from within a specific tribe itself (U.S. EPA Region 5 2011; Warner, Lynn, and Whyte 2021). The U.S. government has a federal obligation to tribal consultation, stemming from centuries of treaties and legal decisions. President Biden issued a memorandum with intent of strengthening tribal relations and consultation, with respect to this legal obligation (Joseph R. Biden Jr. 2021). Section 23.1 of Michigan's 2007 Inland Consent Decree also contains provision to form consultation committees, while inland issues persist, meaningful tribal consultation and notification is lacking in Michigan (GTB 2019).

The concept of a "veto power" in the tribal consultation process is new, with few sources discussing it. Veto power was first mentioned in this research by a tribal employee, in initial correspondence. This is understood as a full range of power as a sovereign nation, to veto any issue or policy change that encroaches on sovereign rights, much like an executive branch veto power in federal U.S. policy (Warner, Lynn, and Whyte 2021).

Through renowned Indigenous scholar Kyle Whyte, a member of the Citizen Potawatomi Nation, more concrete evidence for the need and implementation of a veto power was discovered. Elisabeth Kronk Warner is a member of the Sault Ste. Marie Tribe of Chippewa Indians, and Kathy Lynn is an expert on tribal and environmental issues from the University of Oregon. According to these authors, free, prior, and informed consent, guaranteed to tribes by treaty and trust rights should include a veto power (Warner, Lynn, and Whyte 2021).

"Moreover, given the difference in relative power between the U.S., corporations and many Tribes, tribal communities are often at risk of being exploited. These features, as well as the norm of consent itself, indicate that tribes should be able to veto or dissent to the actions of others that may affect them" (Warner, Lynn, and Whyte 2021: 58).

These authors make a strong case for increased recognition of the rights of tribal entities in the U.S. While tribes are supposed to have this tribal consultation process as an important part of U.S. treaty and trust obligation, the consultation process does not always lend itself in favor of tribal needs. The undefined nature of consultation is part of the problem: "The vagueness of U.S. Indian law on consultation actually represents a breakdown in respect for the consent and veto rights of Indigenous peoples" (Warner, Lynn, and Whyte 2021: 59).

Clearly, there can be room for improvement in the consultation process between tribes at the federal and State level. Some possible positive changes for the future come from Kyle Whyte and others, from within tribal communities and programs, and even from federal or State agencies. Additionally, interviews from this current study may also shed some light on how tribal consultation can be improved (more on this in Interview and Conclusion sections).

3: Methodology

Objectives and Knowledge Building

This research broadly focuses on Indigenous protection of natural resources and the relationship to the environment. Specific attention is offered to water, given the prominence of the Great Lakes and other water quality issues, but the importance of land is also emphasized. Material about Indigenous protection of water and land across North America informs this research and speaks to the larger issues facing Indigenous peoples across Michigan and the United States. Indigenous communities across the United States attempt to govern their resources within a settler colonial context that limits their legal capacity to do so.

An in-depth study of each of the 12 federally recognized tribes in the State of Michigan follows these more general background inquiries. Internet sites for these tribes were referred to in order to understand the current environmental policies and protection of each tribe. Peer reviewed articles and government publications related specifically to Michigan tribes were also explored (with focus on environmental protection and policy).

A study has also been done previously at Western Michigan University related to Indigenous environmental protection in Michigan. Crafts (2013) wrote her master's thesis on Indigenous environmental collaboration in the state, "Managing Tribal Lands and Resources in Michigan: Tribal, State and Federal Influence." This very relevant thesis provides great context and background information about Indigenous environmental protection and policy in Michigan. Crafts' methods also offer a clear example of collaboration with tribes in the State of Michigan and helped significantly to inform this current methodology.

Collaborative Interviews

A major component of this research was the completion of collaborative interviews with Indigenous communities in Michigan. After obtaining approval from Western Michigan University's Institutional Review Board (IRB) (Appendix A), interviews were attempted with natural resource departments from as many Michigan tribes as were willing. Crafts' (2013) model was utilized in planning interviews with tribes. Contact was initially made with all 12 Michigan tribal natural resource departments through personal handwritten letters and gifts, with the guidance of tribal contacts. Mailing addresses were located on specific websites of each natural resource department. Each package included *sema*, tobacco, given its spiritual significance to tribal people in the region. This was done as, "it is appropriate when asking for assistance from an Indigenous elder, knowledge keeper or person to offer tobacco" (Indigenous Offices at Carleton 2021). Due to federal regulations regarding the mailing of tobacco, this was sent in the form of cigar rather than loose form tobacco. Cigars are legal to mail domestically as of 2021-2022, while cigarettes or the preferred loose form of tobacco is more restricted (USPS 2022). Given the noncommercial nature of this gift, loose tobacco or in the form of tobacco pouches would be preferred, but federal regulations had to be followed (Indigenous Offices at Carleton 2021, USPS 2022). Additionally, either a small turtle shaped crystal/stone or a small piece of Michigan copper was included along with a handwritten letter to each of the 12 federally recognized Michigan tribes.

The intention was to generate a collaborative knowledge base, rather than a one-sided, academic inquiry. Like Crafts' (2013) research, these interviews also followed a semi-structured, informal model to encourage collaboration. A list of specific questions focused on tribal

environmental governance was developed to guide the interviews (Appendix B). Care was taken to approach contacts with humility and respect. These interviews serve as a basis for in-depth, current information on the environmental protection policies, goals, and experiences of two tribes in the State of Michigan (Grand Traverse Band of Ottawa and Chippewa Indians and Little River Band of Ottawa Indians). Interviews were initially planned to occur online due to the COVID-19 pandemic but were shifted to in-person with respect to all parties' will and interest. Consistent with Crafts' (2013) research, a recording device was not utilized during all interviews (unless interviewees were willing), to aid in the promotion of collaboration and trust. The two tribal departments which were intervieweed did allow for recording. These transcripts were later anonymized. Three categories of interviewees were approved by Western Michigan University IRB: tribal employees, tribal members, and tribal associates. These people were all referred to the researcher by the tribal natural resource department. Later, interview results were shared with respective tribal contacts to ensure content was appropriate and approved.

Two other potential sources of interviews were considered dependent on the progression and time frame of this project: interviews with knowledgeable individuals outside of the tribal departments, and interviews with State officials or other governmental stakeholders. This project focuses on the Indigenous experience of environmental protection and resource management. But, to understand the Indigenous perspective, it is important to hear some outside, conflicting, or supporting voices. Interviews with state officials or other governmental management and tribal-state-federal collaboration. Due to the primary goal of interviewing

tribal departments and time constraints, these secondary interviews were not attempted, but would provide an interesting incorporation for future research.

Given the need for a thoughtful approach, a website useful to this research is the homepage for various geography specialty groups which study Indigenous people and issues (Indigenous Peoples Specialty Groups 2010). Two important documents relevant to the American Association of Geographers (AAG) Indigenous Peoples Specialty Group exist on this website. "AAG Indigenous Peoples Specialty Group's Declaration of Key Questions About Research Ethics With Indigenous Communities" outlines the goals and ethics of this specialty group (Indigenous Peoples Specialty Group of the Association of American Geographers 2010). The work, "Discussion Paper on Research and Indigenous Peoples" provides more context and information on research ethics and research models (Louis et al. 2009).

These sources provide information about how to ethically conduct research with Indigenous people. The United Nations Declaration on the Rights of Indigenous Peoples was used as a basis for some of the content in these sources (Louis et al. 2009). Some key points include giving Indigenous people control over the research process to ensure data are not used in a destructive way (Louis et al. 2009). In terms of this thesis, this included involving interviewees as much as possible in the recording and dissemination of interview data. Any data accumulated by the researcher alone (literature review) will also largely focus on Indigenous and tribal contributions to authentically include as much of this perspective as possible. Specific ways tribes were included in the interview process was in the development of interview questions, and review of included interview results. For months before completion of interviews, tribes were consulted in order to determine what issues and focus this research

project should have. Part of the reason this research was necessarily broad was in order to engage with as many tribes as possible and leave ample room for tribal ideas and perspectives. This early communication is what led to the focus of tribal consultation in the interviews. After the Interviews section included in this thesis was complete, interviews were also sent back to the tribal departments for review. This was in order to ensure nothing should be removed, clarified, or edited, in an effort to most accurately portray the tribal departmental perspectives.

Analysis

Analysis followed the natural progression of the literature review and collaborative interviews. Data from each of these sources was compiled under specific themes to create a rich understanding of tribal environmental protection. Specific sections detail the results of each interview. The results of these interviews are discussed, with a focus on common topics, ideas, and experiences. Focus is on specific policies and goals of the participating tribes to emphasize how Indigenous environmental governance reflects Indigenous worldviews, incorporates Indigenous environmental knowledge, and protects Indigenous lands.

Taking a critical lens in general is useful when framing these issues of environmental protection in the wider experience of dispossession. Indigenous issues of water security and access to land are inherently structural and perpetuated by mainstream society, a continuation of imperialism (Konkle 2008; Cantzler and Huynh 2016). A central purpose of critical geography is to begin problem solving outside the mainstream (Smith 2001). Since present conditions owe to a long history of colonization and mistreatment, it is obvious that some of these historical and social aspects must be analyzed to understand the systematic mistreatment, exchange of

land and ideas, and imposition of norms. While a critical analysis was not the main substance of this research, a critical perspective is present throughout, including in the Interviews and Conclusion sections.

An additional outcome included the development of a map of the distribution of tribes across Michigan. In addition to this, a map from the EPA was included to display EPA Region 5 tribes (EPA 2012). Maps are useful in analyzing and understanding the experience and distribution of tribes across Michigan. Photographs were also taken throughout the course of this research in order to provide some visual depictions of the tribes that were interviewed.

An important part of final analysis was how Michigan, and the Great Lakes Region can use Indigenous lessons to aid in environmental protection and Indigenous collaborations. The primary focus was on the existing environmental protection efforts of tribes across the state. Some of the key takeaways are: improvement of tribal consultation, Indigenous environmental programming and collaborations in environmental planning efforts as a path to the future, and a respect and understanding of Indigenous land ethic in broader environmental protection efforts. These takeaways can all be bolstered by improving tribal consultation, a topic that is emphasized in the Interviews section.

While extensive prior research has been done on Indigenous protection of the environment, to the author's best knowledge there is a lack of comprehensive research into Indigenous protection of the environment in Michigan. Previous graduate work has been completed on Tribal-State-Federal environmental planning efforts in the state (Crafts 2013). The existing knowledge base would benefit from an updated analysis of this Tribal-State-

Federal relationship in the state, combined with a broad inquiry into historical and contemporary environmental protection efforts of Michigan tribes.

4: Michigan Tribes

The major focus of this project is tribal environmental protection in Michigan. It is important here to provide some background information related to the 12 federally reaffirmed tribes in the State. The 12 tribes are: Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, Sault Ste. Marie Tribe of Chippewa Indians, Bay Mills Indian Community, Hannahville Indian Community, Keweenaw Bay Indian Community, Lac Vieux Desert Band of Lake Superior Chippewa Indians, Little Traverse Bay Bands of Odawa Indians, Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians, Nottawaseppi Huron Band of the Potawatomi, Saginaw Chippewa Indian Tribe, and Pokagon Band of the Potawatomi (Figure 2). United Tribes of Michigan and the Michigan Department of Health and Human Services websites both contain a list of up-to-date contact information and webpages for each of the 12 federally recognized tribes of Michigan (United Tribes of Michigan 2020; Michigan Department of Health and Human Services 2020). This section will briefly account some background information and environmental efforts of Michigan tribes.

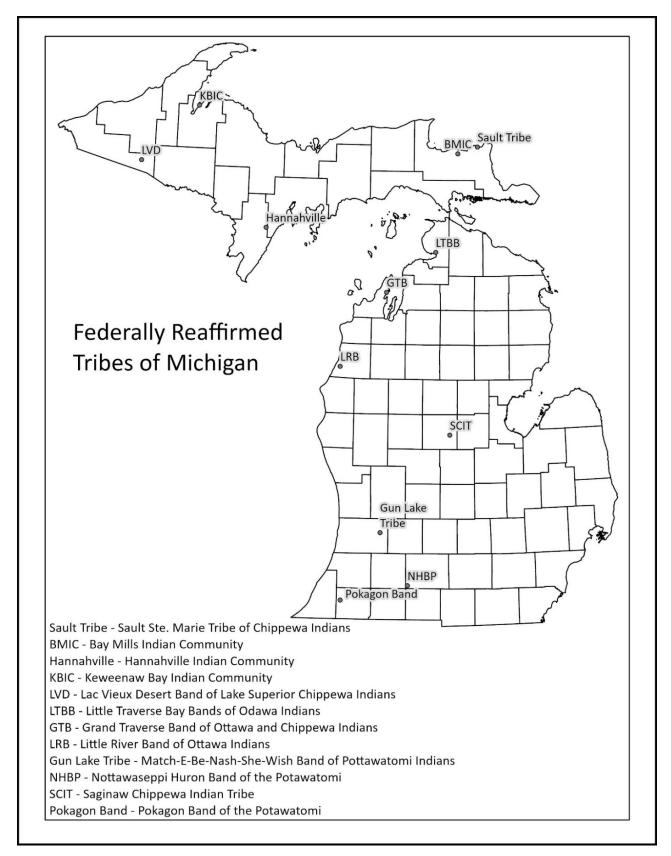


Figure 2: Locations of Michigan tribes (Zachary Reed 2022)

Academic and peer reviewed sources are somewhat lacking when it comes to information pertaining to specific tribes in Michigan. Internet sources specific to each Michigan tribe are a good way to obtain up to date information. These websites also often list the specific natural resource departments and initiatives of the tribe, for example both Grand Traverse Band and the Nottawaseppi Huron Band host natural resource department websites (Grand Traverse Band Natural Resources Department 2020, Nottawaseppi Huron Band of the Potawatomi 2020).

Tribes in Michigan are part of various groups. For instance, the Michigan Tribal Environmental Group (MTEG) is a group of natural resource department employees that meets throughout the year to speak about Michigan tribal environmental issues and activities (Little River Band of Ottawa Indians 2013). The Tribal Air Resources Journal, which began in 2008, covers tribes in EPA Region 5, Michigan, Wisconsin, and Minnesota (Region 5 Tribes 2019). Some groups specifically include the five tribes' party to off-reservation treaty rights. Chippewa Ottawa Resource Authority (CORA) specifically includes these five tribes, while Great Lakes Indian Fish and Wildlife Commission (GLIFWC) includes just Lac Vieux Desert Band, Bay Mills Indian Community, and Keweenaw Bay Indian Community, along with six Wisconsin tribes and two Minnesota tribes (GLIFWC 2021a). CORA and GLIFWC are both considered intertribal commissions, entities that assist tribes in treaty rights. This is reflected in other geographies including the 1854 Treaty Authority in Minnesota and the Northwest Indian Fisheries Commission (NWIFC) in Washington (GLIFWC 2018). These groups help manage, coordinate, and share information about environmental issues in Michigan and regionally.

The Grand Traverse Band of Ottawa and Chippewa Indians (GTB) is headquartered in Peshawbestown, in northern Michigan. In 1980, the Tribe was formally reaffirmed by the federal government. The GTB has a stated commitment to the six-county service area of the Tribe, and the 1836 Ceded Territory (Region 5 Tribes 2019). This exemplifies GTB's concern for the broader community of the region, and the interconnectedness of natural systems.

The GTB's Natural Resources Department homepage provides detailed information and further links on environmental policies and projects of the tribe. The homepage also lists environmental and inland services that the department provides. These services include but are not limited to: soil erosion permits (on tribal land), wetland delineation, issuing of hunting and fishing permits, and GPS mapping.

A major project has been the Boardman River Restoration Project (also known as the Ottaway River) (Grand Traverse Band Natural Resources Department 2020). The Boardman-Ottaway River Restoration Project constitutes one of the most important recent projects for the GTB. This involved removing three dams, constituting the largest dam removal in Michigan history (Figure 3). This project helped restore the Ottaway to its natural conditions, improving plant, fish, and other habitat (Fessell 2021). The final phase of this project includes a proposed "Fish Pass" at the Union Street dam to allow the selective passage of native and desired fish into the Ottaway River (Figure 4) (Great Lakes Fishery Commission 2021). These examples provide just some of the many environmental initiatives of the GTB.



Figure 3: until 2012 much of this land was underwater, due to the Brown Bridge Dam on the Boardman-Ottaway River (Zachary Reed 2021)



Figure 4: Future proposed site of Fish Pass in downtown Traverse City (Zachary Reed 2021)

The Little River Band of Ottawa Indians (LRB) is located in the northwestern Lower Peninsula of Michigan and headquartered in Manistee. While not federally reaffirmed until 1994 (Figure 5), this did not mean environmental activities were not present in the community.

"The Little River Band, as a tribal government, worked with National Forest Service employees to administer land within the Manistee Reservation throughout the 1980s. The National Forest Service relied on the Little River Ottawas to guide its efforts to repatriate remains taken from Indian burial sites within the reservation boundaries" McClurken 2009: 243).

The LRB Natural Resources Department enforces hunting and fishing codes, conducts research,

and promote native species work. A few specific areas of research include water quality, animal

research, and plant research (McClurken 2009). LRB has operated an Air Quality Program since

2005, with an initial concern with ozone traveling up Lake Michigan's shoreline (Region 5 Tribes

2019).

The LRB makes many positive contributions that help the regional environment. As a

tribal government, the LRB and other tribes are ardent defenders of the environment of their

lands and the Great Lakes. Often this work can be with very broad and important issues.

"The Little River Band also contributes to the entire Great Lakes through its focused efforts to preserve and protect the environment and wildlife. Together, the Little River Band, the Little Traverse Bay Bands of Odawa Indians, and the Grand Traverse Band of Ottawa and Chippewa Indians joined the Northwest Michigan Governmental Alliance to oppose the selling of Great Lakes water and slant-drilling in the Great Lakes, to control exotic species in the Great Lakes, and to place limits on land use, solid waste, and sanitation systems in the region" (McClurken 2009: 277).



Figure 5: Little River Band of Ottawa Indians (Zachary Reed 2021)

In closing the discussion of the LRB, one of their most successful environmental projects will be covered. The Arctic Grayling Initiative is a project started by the LRB and brings together more than 45 organizations to help reintroduce Arctic Grayling, *Nmégos*, a native fish, back to the waters of Michigan. Due to many years of logging and overfishing, Arctic Grayling disappeared from the State. Yet this fish, Nmégos, always remained an important part of LRB Tribal cultural heritage. The LRB began research for this project in 2010, and in 2016 the Michigan Department of Natural Resources joined this project. Nmégos Stewardship Plan was developed for the ongoing research and plans for future reintroduction. For LRB, the Arctic Grayling Initiative serves as a wonderful example of the great work the Tribe is accomplishing.

Additionally, this is an example of when collaborations between tribes and other entities appears positive and productive (Little River Band of Ottawa Indians 2020).

Sault Ste. Marie Tribe of Chippewa Indians (Sault Tribe) is centered in the eastern Upper Peninsula of Michigan. Sault Tribe's Natural Resources Services include an Inland Fish and Wildlife Department, a Fisheries Management Program, and an Environmental Department (Sault Tribe 2020a). An Air Quality Program has existed since 2016. Programming specific to air quality include indoor monitoring and community outreach (Region 5 Tribes 2019). Other major projects include ruffed grouse habitat research, which looks to manage the population with continued climate change. Funded by the Great Lakes Restoration Initiative, this research also involves collaboration with Michigan State University and Hiawatha National Forest. The Wildlife Department also conducts marsh restoration in St. Mary's River, which has involved *manoomin* (wild rice) restoration and invasive species management (Sault Tribe 2020b). The Sault Tribe's relationship with the Great Lakes is apparent in their close proximity to Lake Huron, as well as Lake Michigan and Lake Superior.

The Bay Mills Indian Community (BMIC) is located in the northeastern Upper Peninsula of Michigan. BMIC has operated environmental programming since 1991. Current monitoring includes radon testing, which has been tested at higher levels on reservation than in the broader community of Chippewa County, Michigan (Region 5 Tribes 2019). BMIC also operates a collaborative project with Bay Mills Community College and Bay Mills Biological Services. This project examines chemicals within the Waishkey Bay, which has culminated in a focus on PFAS contamination (BMIC 2021).

The Hannahville Indian Community is located in the western Upper Peninsula of Michigan, near Lake Michigan and the border of Wisconsin. Hannahville Indian Community has maintained an environmental program, which has included radon testing and indoor air quality education as part of their programming (Region 5 Tribes 2019). One of their most recent exciting projects has been assisting in funding a trail connecting Gladstone and Escanaba, along Little Bay de Noc of Lake Michigan. Recent work has also commenced on developing brownfield sites in the same area along Little Bay de Noc (Daily Press 2017).

The Keweenaw Bay Indian Community (KBIC) is located in the western Upper Peninsula of Michigan on and near Lake Superior. KBIC has operated an air quality program since 2012. Regional concerns for the Tribe include the Eagle Mine present in the area (Region 5 Tribes 2019, KBIC 2021). Significant impacts of Eagle Mine include the obstructed access to Eagle Rock, a traditional cultural property which bears importance to KBIC. Aside from the detrimental cultural effects this mine has, it also has very damaging ecological impact. This includes wastewater discharges, questionable stability and drainage impacts, and damaging effects to the Salmon Trout River. KBIC also asserts that Eagle Mine and the permits that allow it did not follow necessary tribal consultation processes (KBIC 2021). While significant, Eagle Mine is just one example of many environmental issues that KBIC has been directly involved in combatting.

The Lac Vieux Desert Band of Lake Superior Chippewa Indians (LVD) is located in the western Upper Peninsula of Michigan, near the border with Wisconsin. Water and wetland restoration, beaver control, and rice restoration comprise major concerns for water and environmental issues for the LVD area. Major projects include monitoring and restoring *manoomin* (wild rice) on Lake Lac Vieux Desert (Region 5 Tribes 2019).

The Little Traverse Bay Bands of Odawa Indians (LTBB) is headquartered in Harbor Springs, in northern Lower Michigan. The LTBB Reservation borders Lake Michigan. Significant work is done in the Natural Resources Department concerning water resources. The LTBB produce water quality reports, surface water maps and fish consumption recommendations for the Tribe (Little Traverse Bay Bands of Indians 2020). The Air Quality Program began in 2004 and was focused on radon monitoring. This was later expanded and has had a recent focus of indoor air quality (Region 5 Tribes 2019). Other work includes the research and management of lake sturgeon, and a commitment to preserving sovereign hunting and fishing rights (Little Traverse Bay Bands of Indians – Natural Resources Department 2020).

Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians (Gun Lake Tribe) is located in southwest Michigan. The Tribe's Air Quality Program has existed since 2003 and includes indoor air quality testing. A climate change adaptation plan was adopted in 2015, which has served to implement various energy efficient practices (Region 5 Tribes 2019). Among many other amazing projects, Gun Lake Tribe conducts *nmé* (Lake Sturgeon) restoration, *manoomin* (wild rice) restoration, and native grassland management (Gun Lake Tribe 2017).

The Nottawaseppi Huron Band of the Potawatomi (NHBP) is centered near Athens, in southwest Michigan. The NHBP Environmental Department is the facilitator of a wide range of environmental protection efforts. Some of these efforts include the monitoring of water and air quality, and the regeneration of wild rice. The Air Quality Program has existed since 2001, and includes radon resting and screening for particulate matter in the air (Region 5 Tribes 2019). Other programs include the eradication of invasive species and the cataloging of positive natural resources (Nottawaseppi Huron Band of the Potawatomi 2020). As with other bands in

Michigan, water is incredibly important to the NHBP. Much work has been done in the

monitoring and restoration of waterways near the land base, which includes the Nottawa and

Pine Creeks. Wild rice exists in part of the Nottawa River as well as on the Pine Creek

Reservation (NHBP Environmental Department 2017).

The Saginaw Chippewa Indian Tribe (SCIT) is based in Mt. Pleasant, in central Michigan.

The Tribe's Environmental Team is organized under the umbrella of the Planning Department.

The Planning Department also contains the Environmental Response Program:

"The Tribal Response Program is designed to identify and address contaminated properties that are present on lands under the jurisdiction of SCIT. The goal of the program is to identify, cleanup, and reuse impacted property in a manner that protects human health and the environment. Examples of brownfield sites on SCIT lands are the Mount Pleasant Indian Industrial Boarding School (MIIBS) grounds, illegal dump sites, and a former truck stop" (Saginaw Chippewa Indian Tribe 2020).

This Environmental Response Program exemplifies the SCIT's commitment to revitalization of

their land base. Other efforts include water monitoring on the Chippewa and Coldwater Rivers,

and restoration of manoomin (rice) (SCIT Environmental Team 2020).

While environmental efforts tailored to specific spaces are important, the Tribe also conducts environmental education programming. SCIT hosts Tribal cultural and environmental camps which help educate the youth about environmental issues and culture. These education opportunities include practices like learning about the healing properties of plants and building a sweat lodge (Region 5 Tribes 2019).

The Pokagon Band of the Potawatomi (Pokagon Band) is based in Dowagiac- in southwestern Michigan. The Pokagon Band were federally reaffirmed in 1994 (Low 2006). The Pokagon Band serves a membership area of four counties in southwest Michigan and six counties in northern Indiana, existing as the only federally recognized Tribe in Indiana (Region 5 Tribes 2019). The Tribal Department of Natural Resources is the department which handles environmental issues for the Tribe. There are two divisions of the Tribe's Department of Natural Resources: Environmental Quality and Natural Resources & Conservation (Pokagon Band of Potawatomi 2020). The Department aids the Tribe in recycling a wide variety of hazardous household waste items (Pokagon Band of Potawatomi 2020). Environmental issues are addressed through the Department and a system of comprehensive planning, which seeks to proactively address environmental problems (Region 5 Tribes 2019).

This has been a brief review of the 12 Michigan tribes. The 12 federally reaffirmed tribes in Michigan constitute the primary focus of this project. Focusing on this specific geography is relevant as this research is being conducted at Western Michigan University. Recognizing and learning more about Indigenous communities in any geographic bounds is important. This brief description of Michigan tribes and their environmental initiatives provide a snapshot into the experiences of these groups.

5: Grand Traverse Band Case Study

History

The section that follows is a brief history of the past 200 years of the GTB. This section is primarily adapted from Fletcher's *The Eagle Returns: The Legal History of the Grand Traverse Band of Ottawa and Chippewa Indians* (2012), as was included in the earlier broader treaty history section. Given Fletcher's membership in the GTB and being the primary source of history of the GTB, this document exists as the authoritative text on legal history of the GTB. History leads us to present day. A focused history is necessary to show how massive injustices by the U.S. government led to many years of subjugation and mismanagement of tribal nations. It is also important to realize that while continuously challenged, tribal nations maintained their culture, traditions, and connection to the environment. This led the way to the present-day dichotomy of nations, consent decrees, and flaws of tribal consultation.

1800s

In the early 1800s, Anishinaabek peoples were settled along Lake Michigan's coastline. The Ottawa and Ojibwe living in the Grand Traverse region and nearby had a very productive fishery on the Great Lakes as well as on inland lakes. Additionally, berries and other crops were harvested. Hunting and fishing were traditional and plentiful sources of food and sustenance, until massive depletion was caused by Euro-Americans (Fletcher 2012). By the 1830s, big game like elk and moose were declining fast, and by 1900 there was a mass extinction of fur-bearing animals in the region. Overhunting and overfishing completely destroyed the commercial

business potential. Stocks of animals and fish were drastically reduced for Indigenous people in Michigan (Fletcher 2012).

Prior to the 1830s, the Grand Traverse Anishinaabek lived in wigwams consisting of bark lodges, but after this time period permanent dwellings built of logs became more common. Communities were organized in various villages, which were governed by the family and clan system (Fletcher 2012).

Following the 1836 Treaty (covered previously in the treaty section) more changes came to the Grand Traverse Band and other communities in the region. Peter Dougherty was a protestant missionary who arrived at the newly established Grand Traverse Reservation in 1838. At Henry Schoolcraft's request, Dougherty built a mission on what is now known as Old Mission Peninsula, located on a thin point in Grand Traverse Bay. While seemingly unable to convert the Grand Traverse people to Christianity, the Anishinaabek did sometimes like missionaries around for other reasons. Namely, as allies in the fight for staying on their homelands and for learning the English language (Fletcher 2012).

A desire to stay in their homelands was strong for the Anishinaabek in Michigan, as was true for most Indigenous people. Scouts from across Michigan tribes disliked areas marked for Indian removal such as the State of Kansas. Areas like this lacked rich woods and waterways that the people were used to in Michigan. Michigan Anishinaabek were extremely resistant to removal west. U.S. policy actually turned in their favor in this regard (Fletcher 2012).

"By the time that American and Anishinaabek treaty negotiators sought a new treaty in 1855, the American focus in the Great Lakes had changed a bit, from removal to protection of American economic interests and the collection of Indian debts to American traders" (Fletcher 2012: 42).

During the 1840s and 1850s, the Grand Traverse community started moving from the Old Mission Peninsula to the larger Leelanau Peninsula, where land was able to be purchased. The tribal organization continued to shift, influenced by encroachment of nonnative people, and the expectations of the federal government. Still, the Anishinaabek kept much of their traditional organization and means of survival. This organization of different geographic bands is akin to the tribal organization present in Michigan today (Fletcher 2012).

"In the mid-eighteenth century, bands of family or hunting units would congregate in villages for the summer months—villages in places like Old Mission Point, Aghosatown, Northport, or Peshawbestown. Above this level, according to Richard White, the bands in a region might confederate for specific purposes, such as treaty negotiations. In those instances, there might be the Grand Traverse bands, or the Little Traverse bands, or the Grand River bands, for example" (Fletcher 2012: 44).

Following the 1855 Treaty, which removed annual payments and worsened conditions for the Anishinaabek, the Grand Traverse Anishinaabek and others became increasingly strained. Nonnative people during this time stripped the forest of its lumber, and fish and game became even rarer. Occupation of Michigan by nonnatives had begun with the Lower Peninsula, in southern Michigan. Anishinaabek and other groups living in the Detroit area became some of the first people in the region affected, and later the Potawatomi of southwestern Michigan were similarly impacted (Fletcher 2012). But now, with nonnative people encroaching north, the entire Lower Peninsula was under more pressure to give up land and resources.

The allotment process in the 1855 Treaty was majorly flawed. A lot of the land that was set aside was actually already occupied or secured by the State of Michigan by the Federal Swamp Act. Much of the land that was included in the 1855 Treaty ended up being excluded from allotment claims, leaving little land for the Grand Traverse Anishinaabek and others. Manipulations of the 1855 Treaty and the flawed nature of the allotment process provide another source of potential legal challenge: "In this way, much of the reservation land described in the 1855 Treaty was illusory, creating a possible legal claim for reformation of the treaty to meet the expectations of the Anishinaabek and the United States" (Fletcher 2012: 65).

The flawed allotment process only persisted. After Indian agents from the BIA failed to compile lists of landowners and land descriptions, nonnative people continuously settled on the land meant for Grand Traverse Anishinaabek. From 1844 to 1865, more than 100 non-native families settled on the Grand Traverse Reservation (Fletcher 2012). In the years that followed, many fraudulent acts were recorded that deprived Anishinaabek of lands meant for them (Fletcher 2012).

1900s

Federal policy following the 1855 Treaty tended to completely ignore the Grand Traverse Band and other Anishinaabek in Michigan. Furthermore, during this time period, Anishinaabek lacked federal assistance, as well as state or local assistance (Fletcher 2012).

"The two treaties with the people were broken many times by the federal government. Services promised were not received and the people went without any federal or state assistance from a time period shortly after the treaty of 1855 until 1980 as the Bureau of Indian Affairs determined incorrectly that the Tribe had been terminated by signing the treaty" (GTB 2021: 1).

With the ongoing termination policy that was supported in 1953 by President Eisenhower, more changes came. Termination policies sought to assimilate Indigenous peoples into mainstream culture and also contributed to more loss of land. South Fox Island, an important area to the GTB, was dispossessed from the Anishinaabek. Even in these recent times, land on South Fox Island was dispossessed from Tribal members, and in very unscrupulous ways: "However, in at least two instances, the government sold the lands without *any* of the owners consenting to the sale. In the case of the other sales, the government sold the land with the consent of *some* of the owners, but not all. In legal terms, this is referred to as a "Secretarial transfer" of Indian lands, and is almost certainly illegal" (Fletcher 2012: 74).

Sadly, a nonnative land developer now owns much of South Fox Island and prohibits GTB members from visiting the cemetery of their ancestors. This poses a contemporary risk to the cultural and environmental wellbeing of the Island, since Anishinaabek are unable to visit their ancestors, and a land developer currently possesses the Island. This presents yet another even more current legal consideration (Fletcher 2012).

The later 20th century brought positive developments for the GTB and other tribal entities. A nonprofit corporation was formed in 1972 called Leelanau Indians, Inc. by members of the Grand Traverse Anishinaabek. This nonprofit was important in securing grants and contracts for GTB benefit. This included federal grants used for sewer and water facilities in 1976. Lacking federal recognition due to administrative termination, the GTB was considered destitute leading up to the 1980s. In 1980, the Grand Traverse Band of Ottawa and Chippewa Indians became the first reaffirmed tribe by the new BIA recognition process leading to some financial assistance (Fletcher 2012).

During the 1970s and 1980s, members of the GTB participated in negotiations and court battles regarding the fisheries of Michigan and treaty rights. During these recent times, tribes still experienced significant discrimination by public officials and private individuals. Tribal members had their fishing gear stolen, property damaged, and even experienced physical assault by Michigan Department of Natural Resources agents. Tribal fishermen were harassed and pressured to not continue their treaty protected right to fish. Despite the pressure, GTB

members continued to exercise their fishing rights. Arthur Duhamel, represented by William Rastetter, was one important GTB member who fought legal battles (Fletcher 2012).

Eventually, *United States v. Michigan*, or the Fox Decision, reaffirmed tribal fishing rights guaranteed in the 1836 Treaty of Washington. The United States sued the State of Michigan to stop the interference in tribal treaty rights. Judge Fox issued his opinion in 1979, and this would lead to the negotiation of the 1985 Consent Decree. While signatories to the 1985 and updated 2000 Consent Decree, the GTB was not totally enamored with these Decrees. The agreements helped to reaffirm legal right to fishing, but the Consent Decrees also regulated commercial fishing to very specific areas and reduced the much more productive gill netting fishing procedures of the Tribe (Fletcher 2012).

At the time of federal reaffirmation in 1980, the GTB was very poor. In 1998, the Grand Traverse Band Economic Development Corporation was formed, which would open the Turtle Creek Casino and other gaming operations. Gaming began with high stakes bingo in the 1980s and was supported by President Reagan in an effort to remove tribal dependence on the federal government. With the passing of the Indian Gaming Regulatory Act of 1988, operations across the country were officially endorsed by the federal government. The gaming industry would grow much larger with the introduction of traditional casino games like poker and slot machines. The GTB's gaming-generated profits reached \$1 million a year in 1990 (Fletcher 2012).

2000-2022

Following GTB's success in gaming and other avenues, the Tribe was able to expand their influence even more. Environmental protection and natural resource management continued to develop in a positive way. A major project previously mentioned in the Michigan Tribes section was the removal of a series of dams and continued restoration of the Ottaway River (Figure 6). A series of consent decrees were negotiated to reaffirm hunting and fishing rights of the GTB and the other four Chippewa Ottawa Resource Authority tribes. In 1985, the Great Lakes Consent Decree was agreed upon, which was later renegotiated in 2000 and again starting in 2020. In 2007 an Inland Consent Decree was also negotiated (United States Department of Justice 2015, Michigan Department of Natural Resources 2017, Great Lakes Now 2021).

While by no means a comprehensive account of the legal and cultural history of the Grand Traverse Band of Ottawa and Chippewa Indians, this section has covered major events over the past 200 years. Subsequent information will cover the more present day cultural and environmental events relevant to the GTB.



Figure 6: A more connected Ottaway River in Downtown Traverse City (Zachary Reed 2021)

6: Interviews

This section includes a selection of interviews with members and staff of the Grand Traverse Band of Ottawa and Chippewa Indians (GTB), and the Little River Band of Ottawa Indians (LRB) that occurred in 2021 at their respective departments (Figure 7). The GTB Natural Resources Department was interviewed in October 2021 and is included here first. LRB Natural Resources Department was interviewed in August 2021. The author has no authority to speak on tribal matters or dictate future paths, and the following interviews and analysis were included in good faith, with respect and collaboration to the participating groups. The intention of this research was to create a real representation of Tribal perspectives and goals from a professional perspective at this time, so interviews are emphasized over quantitative analysis. Longer passages of dialogue are included to accurately convey meaning and intention, and to ensure that the perspectives most important to this conversation rise to the top.

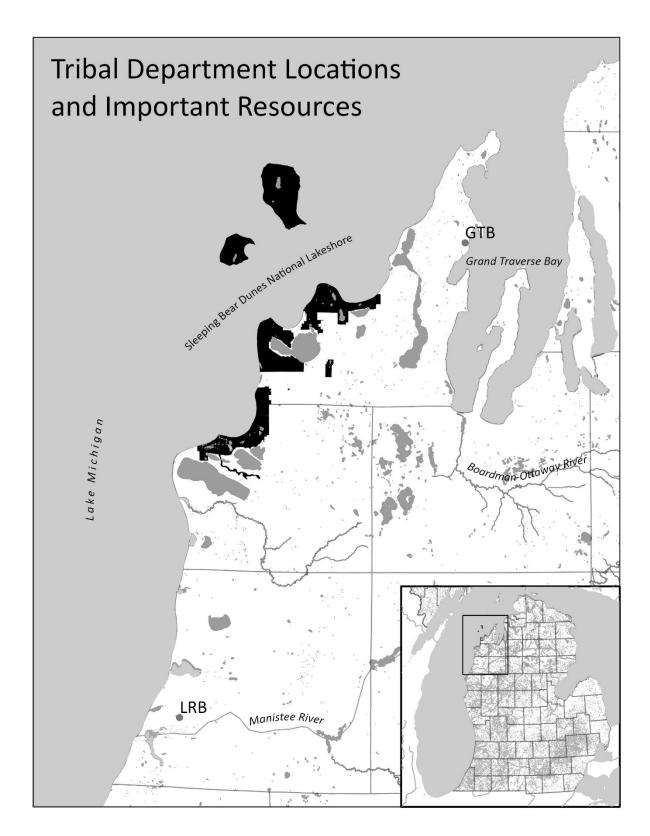


Figure 7: A map of tribal natural resource departments and selected resources (Zachary Reed 2022)

The Grand Traverse Band of Ottawa and Chippewa Indians, October 2021

The GTB is based in Peshawbestown, in northern Lower Michigan. Important local geography includes the Grand Traverse Bay, Lake Michigan, Sleeping Bear Dunes National Lakeshore (Figure 8), the Boardman-Ottaway River, and surrounding waterways and land. The GTB interviews underscore the importance of meaningful consultation, a consideration of the land and water that sustains us, and a need to learn from the past to protect the future landscape, both ecological and societal.

Employee B: "Going to business school and teaching people how to maximize profits and stuff, sure that's good for a capitalistic economy, and it worked for certain purposes, but here we are, wrangling with things like climate change. I would argue climate change is a direct result and impact from that behavior and way of thinking. Capitalism, and domination, instead of living with nature, its living on nature."



Figure 8: GTB lands. Lake Michigan and Sleeping Bear Dunes National Lakeshore (Zachary Reed 2021)

Interviews with the GTB focused on consultation, collaborations, and associated environmental questions. One focal point of the conversation was how environmental protection can be improved holistically- in processes like consultation, and in individuals old and young. The connection to the physical landscape of the GTB aids in its protection. While individuals with less exposure to the natural environment may lack an understanding or willingness to protect it, others who are more immersed in the natural world strive to care for and share the importance of these connections. Immersion in a specific environment from a young age may also help to understand the importance and value of nature and spending time outdoors. While this may seem trivial, it is vital in gauging current and future trends in environmental perception.

Employee A: "I think the more you're exposed to it as your growing up, you grow up in these areas, and it starts to become a part of your everyday life, and you see how you use it every day, that kind of makes you want to protect it even more. I think that just comes naturally up here, we're surrounded by the water, the rivers, the lakes, the way that we're going to get the most benefit out of it is if we take care of it. We take care of it; it takes care of us as well. I think that's a huge driving factor for our tribal community for the environmentalists, is just having it around you since you were growing up, since you were born, being in it and immersed in it, it makes you think about it differently and want to protect it."

While generations continue to participate in hunting and fishing, anecdotal and academic

evidence suggests that youth participation in these activities is declining (Winkler and Warnke

2013, MI DNR 2020). The Tribal community and society at large is experiencing this loss of

connection to the natural world.

Along with proper consultation, collaborations, and increased environmental

protections, educating future generations of environmentalists will be key to improving

consultation and curtailing detrimental anthropogenic outcomes. Educating children about

environmental issues and simply getting them out into nature will yield positive outcomes both

for individuals and the broader world.

Employee A: "You know with technology today, it really is up to the families to bring their children out of that, and go out there and be hunters, fishers, gatherers, and get their children involved. Sadly, I think it probably has declined a lot, over the past couple years with all the advances in technology we're seeing. I don't see too many kids coming in here to get their licenses and stuff. It's the older generation I see coming in, mostly see to get their tags, renew their license. I hate to say yes, that I do see a decline, because it's kind of disheartening, and there's always that hope that we can turn that around, but its just the time that we live in. and that's probably true, not just for the tribal community, but for everybody."

While this decline in youth participation may be evident, these conversations also underscore

the importance of education and youth outreach in environmental stewardship or pushing any

mindset or ethical system forward. It is vital to environmental protection and tribal sovereignty

to educate the youth, both tribal and nontribal, about these issues. With more understanding,

from children to policymakers, perhaps positive consultation and collaborations can become

the norm.

Employee B: "It just occurred to me, a challenge that we all kind of face too, in terms of passing on the importance of environmental stewardship and protection and so on and tying in the youth. And getting the youth in nature, more connected, hunting, fishing, those activities then help build this appreciation for nature and how important it is, and how important it is to preserve it. Historically, all communities had a deeper connection with their elders, and parents, they had the time to spend with kids in the field and going out, and planting a garden, or just doing the things we used to do when we had less technology, distractions, and all that."

Employee B emphasized the loss of connection seemingly experienced across cultures in

recent generations. While a myriad of reasons exist that drive people away from nature and

their elders, technology and mobility seem to be significant drivers.

Employee B: "Also the elders, I think about my grandparents, and what I learned from my grandparents, and how much has that changed. Access to grandparents, because of

proximity, maybe families have to move and spread out, so can't be close to grandparents or whatever, so that kind of linkage is being diminished, devalued almost, and lost. So all these things that allowed for passing of knowledge, more intimately at a family level, it seems like it's a lot less there. So then we as professionals are relying on scientists and media and other mechanisms, you know programs, to hopefully teach kids about the importance of climate change, recognizing that, and what to do, instead of hearing it from family, they're hearing it in programmatic and educational settings. You know how we all are when were in school, maybe well pay attention if it strikes a nerve, but if I'm sitting with my grandmother or grandfather, or parents, and they're trying to explain the importance of these things, I'm more likely to listen, especially to grandparents, I think I'm less likely to listen to my parents sometimes, or my uncles, my relatives. And that's common I think, everywhere. And sitting at the dinner table used to be a very common custom of families, so this shift in the way we're connecting in a closer way is something that, I don't know the answer to that, but it's definitely something that's a big issue to try to combat. By programming, and that."

The importance of family, elders and respecting past generations and traditions connects to

important aspects of GTB's central philosophies or way of life. The Seven Generation and Seven

Grandfather Teachings were included earlier in this work, but here will present a more specific

view of the GTB employees' perception of these ideas in the Department.

Traditional Ecological Knowledge

The Seven Generation and Seven Grandfather Teachings comprise part of what was

previously covered as traditional ecological knowledge. GTB employees spoke about the

importance of the Seven Generation Teachings to the Department.

Employee A: "Well the idea is to use those seven grandfather teachings and pass those along, so again it kind of just happens naturally, I don't think that anyone has pinpointed how it relates, it's just known that those are going to be passed down the generations, and so it just flows along with it naturally I guess, pretty much everything in our culture that shapes the way that we think, like Employee B said, is gathered around those teachings, that's the idea anyways, and nobody is perfect, nobody can live a perfect life, but the idea is to follow as closely as you can, and then that affects the way that you think about everything, the way that you think about how you want to combat these issues in the environment and how we incorporate it into our work and passing that to our youth, we think about that here too, we just did a whole summer series with our youth and relating the seven teachings to the projects that we are doing and presenting to them, so the idea was to have one of the teachings connected to an environmental piece that we were presenting, and then the next one would be another grandfather teaching from a different section in our NRD and those were all presented to the kids, so although we planned this out, it was just natural."

Some of these philosophies are not necessarily concrete, but rather fluid understandings about

how we should live cohesively in this world.

Employee B: "I've heard different characterizations of the seven generations concept or idea, and people tend to get fixated on that, okay, how many years is that? I figure if a generation is this many years then... They get caught up with the detail of the calculation more than the concept. The concept is the point. I have heard seven generations could be a way of thinking into seven generations ahead, I have heard it considering three generations into the past, a consideration of everyone's elders, then one generation that we're in, and three ahead, so it spans this time. To me the point is, respect the past, learn from it, employ it now so that you can make a better future for generations to come. And those seven teachings are like the thread that goes through all that and allows for the best possibility for that kind of way of thinking to persist and continue. And if that happens, then that is a damn good thing. If the teachings were greed and domination and capitalism and kind of the negative aspects of society today, where is that gonna get us? And I think we're realizing what is happening with that. Society is so fixated on improving, getting faster, building bigger, making more. None of the seven teachings play into that, or they're compromised by that. As Employee A put it, it's kind of built into a way of thinking and doing what we do. You're talking to a natural resources department, I'm curious to know how that works in a law enforcement department, or OMB (Office of Management and Budget). The youth, I'm really happy with the way they're doing that, not that my opinion matters, but it's very cool to see that growth and consideration.

Going to business school and teaching people how to maximize profits and stuff, sure that's good for a capitalistic economy, and it worked for certain purposes, but here we are, wrangling with things like climate change. I would argue climate change is a direct result and impact from that behavior and way of thinking. Capitalism, and domination, instead of living with nature, its living on nature."

Native Species vs Invasive Species

The GTB Natural Resource Department employees discussed the importance of native

species and the detriments of invasive species. On Lake Leelanau, Eurasian water milfoil has

been a serious issue. The GTB championed efforts to use a novel technique in curtailing the spread of this species. Benthic barriers have been used to cover stands of milfoil:

Employee A: "What they're doing is using benthic barriers and covering the stands of the milfoil up, and kind of just blocking the milfoil from getting any of the nutrients that it would need, so they essentially just die off, and everything else dies under the benthic barrier, but they're replanting the native vegetation to restore it. That's been pretty successful."

Climate change and anthropogenic strains on the environment threaten the continued survival of important native species in Michigan and elsewhere. According to Department employees, whitefish is a species already experiencing decline due to overfishing and other factors and continues to be threatened. Other invasive species include the Asian Carp, which is threatening many waters of the Great Lakes. The Asian long horned beetle is another notable invasive species.

At a park near the NRD headquarters, contractors have been hired to replant native vegetation. Native plants have also been planted at the Eyaawing Museum, the Tribal cultural museum. Maple trees, which are coveted for their syrup content, are another important native species. Maple trees were described by Department employees as incredibly important to the tribal culture. Maple syrup is another traditional food, like whitefish, that is threatened by climate change and development.

Sacred medicine including sweetgrass also grows in Michigan and specifically around the GTB area. Wild rice grows in the area but is more common to other places in Michigan. Still, collaborations between the other Michigan tribes and regionally has helped replantation and protection of *manoomin* (wild rice). Birch is a tree with many uses for its bark. Birch is also of concern because it is less common on the landscape and may also be threatened by climate

change and other challenges. Cedar is yet another tree species that was mentioned as important to the GTB. Important native animal species include the whitefish, deer, and wolf, among many others.

Consultation

Tribal consultation necessitates the involvement of tribes in federal and state level decision making processes, along with more localized and specific issues. When asked about a definition of consultation, Employee A had an enlightening response for how true tribal consultation should operate:

Employee A: "So, being informed about various issues or permitting, or anything, talking about being brought to the table to talk about these threatening issues, asking for our opinion, and then truly using it, true consultation will happen when there's a meeting of the minds and something comes forward from that in consideration of what the tribes are saying and being able to take that information and use that in a way that is considerate and helpful. Consultation doesn't happen just because we're reached out to, and they hear us, but they're not listening to us. So true consultation would happen in an ideal world where there would be members from all different parties coming together to figure out a solution for one issue, and truly active listening, and actions taken from that."

Along with the issue of empty consultation, or a seat at the table, without any meaningful

incorporation of tribal perspective into policy, other issues in consultation persist. One such

issue is one of timeliness. The lack of respectful time to consider consultation is common with

tribal consultation, and directly goes against proposed standards in the process (United Nations

2007; Warner, Lynn, and Whyte 2021).

Employee A: "The way that I feel the consultation process fails us here is that they never do it in a timely manner it feels like. It always feels like 'Here's this huge issue, you guys have a week to come up with your comments on it!' We're just never notified ahead of time even if it's something that's been in the making for months even. It feels like we're always notified very last minute." When questioned about any examples of success in consultation, the response was decisive.

While consultation processes are somewhat abundant, the proper or meaningful execution of

these consultations leaves much to be desired. From the Department's perspective,

consultation has generally failed the GTB in various environmental and societal issues. Some of

these important regional issues include the Nestle water withdrawal and Enbridge Line 5.

Employee A: "No, not really. We gave our opinions about Nestle, the water withdrawal. That wasn't considered, that permit was granted. With Line 5, I feel like that's such a big issue too, it seems like they're listening and giving in to some of our stuff, but it never really feels true to me. They say, 'we'll listen, we're going to have consultation for Line 5, and we will listen to you.' But then they turn around and they let Enbridge hire their own environmental consulting company to go out and do the environmental assessment. There should be a third party doing that, which is what the tribes were saying, why isn't a third party doing the environmental assessments or impact statements when Enbridge could very easily just hire somebody to go and give them the results they want, and that's a concern. It's difficult to think of one that's been successful, as far as the time that I've been here. Surface level successful, maybe."

While clear obvious successes of consultation may be surface level or fleeting, the GTB

employees did outline some ways that tribal consultation could improve or have the potential

to be much more meaningful for the Tribe.

Employee A: "It definitely has the potential to be meaningful, but the right people have to get in, to truly listen and hear, and kind of get over trying to see who is more powerful. Its almost like the State sometimes thinks that they're above the Tribes, they're the top dogs, they have the say, they have the biologists, they know better, it just feels like there's this false sense of hierarchy. And that is not there, because the tribes are essentially our own State, we're our own country, and we're federally recognized tribes, we're sovereign governments, and sometimes it feels like that doesn't really mean anything to the State. There is hope I think. I have personally talked to people from the State that are willing to listen and willing to look at us as equals. We have biologists that are just as capable as the State does. And so, there is hope. On other issues like negotiating the consent decree and stuff, that's where it starts to feel like more of a hierarchy, where they'll listen to us on the little stuff, but they get the big stuff. They get the Great Lakes, they get the say on the big stuff. If we could get more of the people that are willing to listen, like the people that I'm referring to is the water division, they seem to be really open to hearing us. Like I said with the benthic barriers, they changed their mind from being totally against it to hear us, and say well they might have come up with this new technique that beats out the old way of doing it and they are willing to listen to that. If we could get more people like that in consultation processes and everything with the Tribe, I think there's a little bit of hope for long term success and working together, its just pulling people out of that old way of thinking."

One major issue in tribal consultation is the individual tribe's capacity in participating in various consultation processes. There are often so many issues that could warrant consultation- at the local, state and federal levels. If funding for consultation, or in general increased funding for environmental departments broadly, this could shift the balance of power or at least enable tribes to devote more time and energy to the consultation process. When asked if it is difficult to have the capacity to participate in all the relevant conversations, the Department agreed that capacity to engage in consultation is lacking.

Employee A: "Absolutely it is, definitely. A lot of these issues too, you almost have to be an environmental lawyer to have the right words to say and be able to comment on it in a way that will be taken seriously. We're only a team of 15 people now, where the State might be a team of 50 people, and have that capacity there to touch on every single issue that comes in, and be knowledgeable and experienced and technically skilled enough. It is kind of difficult, and especially in a sense too that, Employee B and I have talked about this before, but being able to pay people to be here and keep them here, so that way we can have some traction and when we do have opportunity for consultation it can be in a meaningful way, but if we have such a high turnover rate here because we can't pay people enough to stay, it makes it very difficult to have that capacity to be able to weigh in and give our stance, and be able to advise the council on what they should do."

Increased time, resources, and funding would help the Tribe engage in consultation processes.

Improving the capacity of the Department to engage in consultation could then yield more

meaningful outcomes, in the form of Tribal perspectives and needs being appropriately

incorporated into decisions. Some of these specific improvements could be increased salaries,

additional employee positions specific to this work, and overall increasing environmental

funding.

Employee A: "They are talking about the funding, but one thing they're not talking about is increasing that funding. Where if they increased that funding to go to our GAP programs to kind of umbrella our other programs, increasing the pay, that would be helpful. Instead, it's the actual opposite, because they're not increasing the funding for those programs, and then every time a Tribe comes in, that funding goes down a little bit, because we all have to share it equally, so when one more tribe comes in, that piece of the pie gets a little smaller for each tribe. Although it's great when a Tribe is federally recognized and they get an environmental program, but they haven't addressed that its slowly being depleted as more and more tribes get these programs, without any supplemental funding with that in consideration. So, I guess that's a long-winded way of saying, they could provide more funding to the tribes for environmental programs."

In addition to funding, other routes could be taken to improve engagement and understanding

of Tribal needs. Employee B developed a novel idea for an interdepartmental exchange

program between the Tribes and different State or federal agencies. These relationships could

foster greater understanding of conflicting perspectives, perhaps remedying specific or broad

disagreements. This exchange could also serve as a remedy for blind spots, for without an

outside, objective perspective, organizational and individual flaws can easily be overlooked.

Employee B: "I've thought about that for years, how cool would it be if all agencies had some sort of exchange student program, where they would require some of their staff that you know are going to work with tribes, they work with and for a tribe for a year, learn that kind of environment. Likewise, tribal employees could work for those agencies for a time period, so that oh yeah this is not what I expected, I see all these limitations if I'm working for EGLE for example, the pressures from the governor's office, or all the things they are having to deal with. That's where I think it does work really well, when someone like XXX who worked for a tribe now works for the State, and you develop a personal relationship, a trusting relationship with her, and you can just call her offline and say what's the deal? And you worked it out, you worked it out. It's that kind of cycling or sharing of staff in those different roles, makes all the difference. I like to use the Boardman as an example, where we might complain about losing staff like Employee E and F, and they go somewhere else, but the reality is because of where they ended up, they didn't go to Washington State or something where we didn't work with them anymore, because they are in those capacities with the City, with Conservation Resource Alliance, and all these different entities that we do collaborate with, it sort of expanded that understanding and improved dramatically the consultative process that's supposed to happen. A lot of it is people don't know each other, they haven't established that trust."

A lot of work must be done to increase the effectiveness of the tribal consultation process.

While the GTB Natural Resources Department already has great successes in collaboration, and

positive developments have occurred, the tribal consultation process must be improved. In

providing better consultation, conditions of the tribe and by extension, Michigan and the

broader world can also be improved.

Employee A: "We just got to keep hoping we break some cycles at some point, you get enough people listening and more conversations like this, it will happen, one day."

Employee B: "There's the seven generations thinking right there, it doesn't have to happen today, but we're trying to lay groundwork to improve it in the future. Cuz that's what you're thinking about, that's what we're thinking about. It's not necessarily today, it's about how your kids are going to experience the world."

Employee A: "And that's why it is so important to get your kids out there and experiencing nature, and getting them to fall in love with it, because they're going to be the ones that are going to grow up and make the laws and policies and procedures, and environmental work."

From conversations with GTB employees, it is obvious that a lot can be done to improve

consultation and collaboration with Tribes. Consultation could be improved at the various

levels, as a process, and through developing further relationships on an individual basis. This

could be accomplished informally, or through an exchange program as stated by GTB Employee

B. Youth should be engaged to ensure that environmental advocates exist in future

generations. The Seven Generation and Seven Grandfather teachings should be understood and

lived. Consideration of key human values and respect of past and future generations can help

individuals and organizations operate in sync with surrounding ecology. Humans could live with

nature, instead of on nature.

To live in some form of harmony with the natural world will require involvement of many, often conflicting, stakeholders. Large issues like Enbridge Line 5, disagreements about

wolf hunts, and extraction of water involves sovereign tribal nations, corporations, states, and individuals at every level. Engagement and change is then a systematic *and* personal undertaking. To improve consultation and relationships between parties, a holistic approach is required. Future goals should be carefully considered with lessons from the past, grounded in present action and discourse. Individuals must look inward at their values and goals, while also engaging outward with the systems and processes that hold power and sway. Meaningful tribal consultation will broadly benefit ecology and society. The Little River Band of Ottawa Indians, August 2021

The LRB is based in Manistee, Michigan, along the eastern shore of Lake Michigan.

Traditional land also includes the Manistee River (Figure 9, Figure 10). The LRB as a Tribe and

sovereign government has grown through the generations. Through capacity building, the

Tribe's government and specifically the Natural Resources Department has consistently

improved.

Employee D: "...there's also the way of life, that component. That's important, that's key, and that's critical, and we can't lose sight of that when we are talking about rights to hunt, fish, and gather. It's not just the financial or the commercial or even just the subsistence harvest, it's also that relationship that the Tribe and its citizens have with those resources."



Figure 9: LRB lands. The Manistee River near the sturgeon rearing facility (Zachary Reed 2021)

The LRB Natural Resources Department explained some of the specifics of their geography.

While the proximity of Lake Michigan makes this resource immensely important, the lack of an

adequate port draws focus away from the big lake and towards inland waters. Because of this,

environmental programming and use of water generally leans towards inland systems.

Employee D: "I will say that for this Tribe, and this is kind of an accident of geography, we don't have a good protective port around this area. So there are some tribes that are much more Great Lakes focused because seven generations ago, their folks could get out a lot easier onto the big water, here it's a little trickier, so we tend to be more inland focused as a Tribe, than some of the other tribes, say GTB [Grand Traverse Band], where they have those two sheltered bays, boy if you're gonna be up there, boy you can get out on lake Michigan and it can be fair conditions, and you go on the other side of the Leelanau Peninsula and you're getting hammered. So just because of where we are at as a Tribe we are probably less focused on great lakes harvesting issues, not to say that we don't do it, we obviously do exercise our rights there, but we are more of an inland focused tribe. Bay Mills up at White Fish Bay, right, yeah that's a great sheltered bay, you're going to want to be out there pulling in white fish if you can, it's easier to access than it is for us."

Traditional Ecological Knowledge and Collaboration

Important goals for the LRB include maintaining existing populations of native species,

and possible future reintroduction of native species that no longer exist on the landscape. By

keeping ecosystems intact, the Tribe helps ensure balance in the region and the relationship

between animals. The timeline for projects can sometimes be far into the future. Broadly, both

Tribal work and environmental programming take years or even decades to come to fruition.

This can sometimes be indicative of lack of funds, but largely is a mechanism of the

thoughtfulness and long-term planning efforts of the Tribal Department. The potential for

future elk expansion in Michigan is one such project planned for the long-term.

Employee C: "Yeah and same thing with an elk expansion, this won't be something that will happen in two or three years, it will most likely take a considerable amount of time, you know, if the boundaries are extended, to create suitable habitat and corridors, if you build it they will come kind of thing, and then you have to wait for the population to

increase and expand. So that just takes time. It's kind of like when people see a forest that gets clear cut, what are the goals of that forest, initially it's not aesthetically appealing, but what's that forest going to look like in five years, ten years, seven generations from now. One of the teachings from the Tribe is you manage for your seven generations, or seven generations from now. I look at what time that will be, like at the Tribal restoration site down in Custer, what's that going to look like in seven generations from now, well it's going to be awesome. What would that have looked like if we left all of that invasive in there, with no management, so that's kind of the thing that I look at. It's hard sometimes for people to see what habitat can be in the future if they are not familiar with natural resources management."

The Seven Generation Teachings are something that permeate the Department's philosophy

and actions. This type of long-term planning and realization that progress happens on a daily

basis might be useful for other agencies looking for a guide to thoughtful development and

capacity building.

Employee D: "I guess the second thing I would mention is more broadly that natural progression like you're talking about, yeah we have treaties, our rights to hunt fish and gather, to harvest, we have court cases that affirm, and typically those court cases talk in terms of property rights, which is the way the court defines, and that's all good, that's appropriate, but for us it is more, right?

It is a relationship with those resources, and it is a way of life, as opposed to, you know, from the economic standpoint 'we get so many fish, it's a buck fifty per pound of weight, how many families can that support when you're selling? What does that business model look like?' Ok, that's important. Absolutely you have to know that because if you're not making money, you're doing something else. But there's also the way of life, that component. That's important, that's key, and that's critical, and we can't lose sight of that when we are talking about rights to hunt, fish, and gather. It's not just the financial or the commercial or even just the subsistence harvest, it's also that relationship that the Tribe and its citizens have with those resources. Air, land or water, or fish and game, or plants, or whatever that is."

When asked about the Seven Generation Teachings, Employee D spoke about its importance to

the Department, and also how differing time scales can operate at the same time. While a tribal

understanding of time might emphasize looking at seven consecutive generations, a western

understanding of time might want more immediate results. This juxtaposition of instant

gratification vs thoughtful long-term planning is evident in specific environmental projects, like

the Arctic Grayling Initiative, but also tends to permeate everyday life and work. When working

with partners, it is important to recognize and respect these different time scales and

perceptions of time. Also relevant to note is the importance to balancing long-term and short-

term goals and different time scales in any environmental project, whether tribal or nontribal.

Employee D: "Yeah, so that's a big one. So our time scale is a little bit different, and sometimes there are folks who don't understand or appreciate or agree that time scale. And those aren't just outside agencies, sometimes they are inside people who have other priorities that are a lot shorter than that. So it's at least a good place to start from a discussion, and it can't always win, because sometimes something's got to get done in the next 90 days, we have a construction project say, or a road has to be laid, so you know, those different time frames, but for us that's kind of where we start from.

I don't know if you've heard of the Seven Grandfather's Teachings, so that's another one that helps in the Department, those are kind of like our core values that we interpret when we are looking to our mission and what sorts of goals and objectives and plans we're going to have to meet that mission is we put them through the Seven Grandfather's Teachings lens and look at things and how does it line up with those teachings. And sometimes it may be a good project that just doesn't fit in that way. Those are the two that I am most familiar with that really help us with our day to day. My lead, the person who supervises me, is our historic preservation officer director and he's much more culturally attuned, astute, a more traditional person than I am, and so he definitely offers to help me and offer some of those things to me which I really appreciate.

Now I have heard the Seven Generation Teachings too, this might be blasphemy, but I have heard this put by folks, yes we look forward seven generations, but the other side would be, we look to the three forward, our current generation, and the three back, because that's a mental model, what would my great grandfather have said, done, how would he have viewed this, whatever it is, this problem, this plan, this project, and how can I do this plan, project, whatever, to benefit my great grandchildren, right, so that three forward and three back, that's not often spoken about, so even putting it down on tape, maybe I am saying more even than I know, but I have heard that before as another way to incorporate Seven Generations thinking, planning, living."

The incorporation of the Seven Generation Teachings into Departmental and Tribal goals

signifies its importance to the community and individuals. The idea of incorporating the

Teachings into "thinking, planning, living" also beckons the holistic nature of this idea. To truly

think in this way, it must be something that we actually live our lives by. And to some tribal

individuals and groups, this way of life aids in both specific initiatives and broader, long-term

plans.

While the importance of collaborative partnerships was discussed, the need to maintain

focus on Departmental and Tribal goals was underscored.

Employee D: "We do a lot of work with Grand Valley, we do work with CMU, we haven't made any inroads yet to Western, I am sure there are some areas of expertise that university could offer us too, like Employee C said, we just sort of know who we have been working with, and who we have those historical relationships with. But there's always opportunities, I don't really know anybody there yet, but if they have a good geography department, maybe that's something we can outsource, or work on some projects with folks that can do that. We are always open to those kinds of partnerships; how can we get people to help when our goals to align."

Past relationships with federal agencies have been difficult, however the present-day climate is

sometimes one of collaboration and knowledge sharing:

Employee D: "the fact is EPA is strongly committed to building capacity within Indian Country, that capacity to be able to regulate our environment, that capacity to have meaningful input into federal policy and regulation and laws, to be able to determine the environmental quality of our reservations for our citizens. EPA has been very committed and have been a long-term partner with us in providing us resources, financial and technical, to help us build that capacity."

Along with the EPA, another agency that the LRB Natural Resources Department often deals

with is the Michigan Department of Natural Resources (DNR). Collaborative projects exist that

help bolster environmental initiatives for both the Tribe and the State. In some of these

projects, the LRB have paved the way as leaders and innovators in environmental work.

Employee D: "We talked about the sturgeon project, we talked about the arctic grayling project, those are two really big ones he's working on, especially with external partners, it's interesting, I don't know if I mentioned this before, but what's interesting about those are those are two that we started here internally, and then DNR recognized, and our other partners recognized the value of joining with us. Which I think is pretty stellar considering we got, what, ten, twelve biologists, and DNR has 4,000. So there's just such

a different scale in the amount of work they can do and the amount of funding they can apply towards a research project or any other natural resources problem, but still, we have been able to be on that cutting edge, to say yeah we started the arctic grayling work, we were doing this assessment ten years before the State decided, there's some value here, how can we partner with the Tribe. That's been interesting to see how that goes along and same with the sturgeon, where they have those kinds of rearing facilities throughout the State now, but we were really kind of starting on that."



Figure 10: LRB sturgeon rearing facility near the Manistee River (Zachary Reed 2021)

Still, aside from some positive collaborations and relationships, the need for increased capacity for consultation exists. Consultation can be improved, as part of a broader improvement in tribal sovereignty and rights. With respect to the U.S. Federal Trust obligations, these processes and relationships have a legal basis for such improvements (Joseph R. Biden Jr. 2021).

Consultation

The LRB Department underlined current important issues that face the tribal and regional landscape. Chronic wasting disease in deer is one major issue that tribes and state governments have acted on. Another current issue of which some conflict of opinion exists is past and proposed wolf hunts.

Employee C: "Chronic wasting disease in the ungulate population is a huge thing. The U.S. Fish and Wildlife just delisted the gray wolves, and gray wolves are super important to tribes both from a cultural and ecological aspect. That's a huge issue right now. One of our concerns is once wolves are delisted, management goes over to the State. If we look at the track record from before when it was delisted, and what happened over in Wisconsin with the wolf hunt last year, it's a big concern and issue that we have."

From the Department's perspective, past wolf hunt consultation was lacking or nonexistent.

The last wolf hunt in Michigan occurred in 2013, and while tribes did express negative sentiments, this deep concern and appreciation of wolves was not considered when implementing past wolf hunts. A recent wolf hunt also occurred in Wisconsin, which decimated the population and was condemned by regional tribes (GLIFWC 2021b). When speaking on the Michigan wolf hunt of almost a decade ago, both employees expressed the scientific basis for the Department and Tribe's opposition to wolf hunts. While these sentiments are rooted in cultural and spiritual appreciation, and a traditional understanding of ecosystems and balance of life, it is supported by an immense record of hard science (Stone et al. 2017, Vucetich et al. 2017, Wallach et al. 2017). Protecting the wolf has cultural, spiritual, scientific, and ecological basis, and should be respected as the key component of the ecosystem and landscape that it is.

Employee C: "Yeah, I won't get into any detail. We do not support sport hunting, and that's essentially what that was, was a sport hunt. The reasons that were stated for having the hunt, I believe that we proved that those were not biologically based and that they would not meet the goals and objectives of what that hunt was used for." When asked if the State is listening to tribes during this current debate, Employee D answered

with a resounding "no."

Employee D: "I will say no. The State of course, like the Tribe, is not a homogenous entity. So we have some biologists at Employee C's level, at my level, within the DNR and other agencies who do not believe in the hunt. You know, I can't cite and quote. They are as opposed to the hunt as some of the tribes, as some of the tribal biologists and policy people would be. However, there's other levels of government, other agencies, other people within those agencies, they are definitely going forward. So there will be a consultation process. I say no that they don't listen to us because, again during the last hunt, they chose not to listen to us. So we raised the challenge under the auspices of the Inland Consent Decree that was signed in 2007 and it has some requirements in it, we felt the state violated those requirements. The big one being what Employee C has just spoken to, that their management was not based on biological need, it was not based on science, it was based on social pressures, was our assertion. And like Employee C said, and I say, I feel like we proved that assertion pretty clearly, you know? It was pretty hard to argue it, and we had some folks that would privately admit that but of course, you know they went ahead with their hunt anyway. So if the past is any indicator of the future, they will do the same thing this time where they will have a consultation of some sort with the tribes over the proposed wolf hunt, and they will do what they are going to do anyway, whether that's driven by the State legislature, whether that's driven by the State NRC, whether that's driven by the Department of Natural Resources itself. Wherever that drive comes from, the sport hunting community are probably going to be the ones behind that. And yeah, I do not expect that our consultation efforts with the State will result in a change of decision. I hate to be pessimistic about it, I will go in with every hope and intent to convince some minds and change some decisions, but I don't have unrealistic expectations on that."

It is obvious from past experiences that the tribal consultation process does not always make

both parties whole and seems to be one sided. One issue with consultation is its complexity and

broad nature. Consultation can mean somewhat different things to different people and

groups. Employee D gave a solid definition of consultation from the Department's perspective

and explained the difference between "Big C" Consultation and "little c" consultation.

Employee D: " So, the State will talk about "Big C" Consultation vs "little c" consultation. Right? And I can't remember who came up with that, but someone on the tribal side did. So there's the official consultation under the governor's directive that was started with... I think the executive directive that people most frequently cite is under Governor Snyder in 2012. Not executive order, a directive. What the difference is I couldn't tell you. But it was created, and the current governor has chosen to continue to reaffirm that executive directive and to honor it. Which is that orders her agencies to consult with tribes on matters that could be of tribal interest, roughly stated. So that's where the consultation kind of comes from, that official consultation. And there's kind of the small c consultation which Employee C has an ad hoc committee group with some State folks that he'll sit on. I'll sit with and be able to broach issues with the DNR director, for example, or talk with other staff on other things of a more informal nature. Whereas formal consultation, "Big C" Consultation, that typically involves elected officials. That's more of that government-to-government relationship that the State wants to partake in."

The complexity of tribal consultation, with moving parts of different federal and state agencies,

tribes, and even local governments and other nongovernmental organizations creates a climate

that can be difficult to navigate. Even the best funded and staffed departments would have

problems attending to such a complex and broad issue that is tribal consultation.

The language about 'free, prior and informed consent,' in consultation processes seems

to be lacking in many instances. When questioned about the application of 'free, prior, and

informed consent', the Department agreed that federal officials can be lacking in their

fulfillment of this responsibility, while tribes also lack the capacity and manpower to participate

in extensive consultation processes required to meet acceptable standards.

Employee D: "For sure, absolutely. And that's kind of at the State level, so with consultation we always kind of have to keep that separate because the Feds do have a trust responsibility, and their consultation is more formally required, then whereas the State right, it's the governor's executive directive, and then the next governor can choose whether or not they follow it. They could have a new executive directive. However, consultation between the tribes and the federal government is more formalized in federal law in the doctrine of trust responsibility. So I try to keep those two separate, so with the wolf we've got both issues going on at the same time. We've got the Fish and Wildlife Service, a federal agency proposing to delist, now they delist, then also in parallel to that, we have the State DNR which is going to propose the new wolf management plan, and probably a new hunt. So those two things, Employee C and I, have to keep track of these two agencies that have two separate processes, and they

both want to consult with us. And that's great, and we want to consult with them, however we do run into some staff limiting issues."

While the consultation issue can be complex, there are clear ways that individuals and

departments see this process can be improved. The LRB Natural Resources Department

provided some perspective on approaches to improve consultation.

Employee D: "But yes, defining consultation, like you asked right, I gave kind of a very general definition. You go back and listen right, probably not a whole lot of specifics in my answer, and that's because we're all trying to define what consultation means, and it can mean different things in different contexts. It should be able to be initiated by both parties, both sides of the table should be able to initiate consultation. At least as much of the onus should be on tribes to say 'hey DNR, we think you're doing something that we might be interested in, lets have some consultation' as it is for them to say "Jeez I think they're going to care about turkey harvesting, maybe we should call somebody up before we change our rules, and talk to them.' So it should be both ways, and there are a couple of other principles that I have, we've come to some basic definitions through that committee, but over the last two years now plus, we really haven't had a lot of discussion on that because there have been other issues that the same people that are on that committee are working on. So, we haven't really had a lot of time and energy to put towards that. But definitely I think that it can be improved, I think some specificity could help, I think also structuring and tiering it more, of can we focus more on those informal consultation processes so that it doesn't have to get to elected officials, and lawyers, and judges, and all that malarky. There's a committee of about 12 people between the tribal, state, and federal reps that are working on this."

Some key insights and possible improvements arose on this conversation on consultation. One

issue with consultation is that people are still trying to define consultation and processes to engage in meaningful consultation. Consultation can look differently at the federal, state, or local levels. One key component is that consultation should be a truly collaborative process, where either a tribal or outside entity can initiate it. Consultation should allow adequate time and resources for the Tribe to engage effectively. Employee D's ideas of "structuring and tiering" consultation, making this process specific so that it isn't so vague could aid in meaningful resolutions. It is important to emphasize that tribes and other stakeholders are currently working on the issue of tribal consultation. With more eyes on the process, working to create a meaningful framework and structure, the possibility for real improvement exists.

7: Conclusion

This thesis examined tribal environmental protection in Michigan, with a focus on improving consultation and collaboration. Interviews were conducted with the Grand Traverse Band of Ottawa and Chippewa Indians, and the Little River Band of Ottawa Indians. The Conclusion section includes reflections on the research process, and resolutions about results and possible solutions. Collaborations and tribal consultation can be improved by defining consultation, improving funding capacity, and respecting tribal teachings and perspectives.

Reflections

Certain aspects of this research methodology could be modified to encourage more collaboration or better results. These suggestions will be included here for any future endeavors by the author or others to better connect to tribal nations and other research goals. While the predominance of COVID-19 certainly affected the course of this research, circumstances will always be fluid, and there will always be situations that are out of one's control.

One major difference in methodology between this research and Crafts' (2013) prior research was the use of email vs phones. Crafts called tribal contacts in an effort to secure interviews. This methodology differed in that first contact was through handwritten letters, and then follow up emails were sent to most of the tribes. Connections were better formed on a more personal basis through tribal contacts from the committee team. Additionally, once contact was established with the tribes, other recommendations were made for specific phone

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numbers and email addresses to contact. These recommendations also proved fruitful, while not always leading to actual interviews, they did lead to new written sources or simply insight into this research. Further correspondence with tribes also revealed that the letter and gifts sent to tribes did not always reach the specific departments they were addressed to. While it seems that they did reach most of the addressees, this presents another consideration.

One realization is that working with tribal nations and individuals is a complex endeavor, and care should be taken to proceed with respect, humility, and prior knowledge. While knowledge that could be learned is immense, it is important to go into these contacts and relationships with the maximum amount of background knowledge and prior research. Going in blind is disrespectful and may not yield any meaningful relationships. Further, relationships with tribes and individuals should not end with the final conclusion of the research project or be based on standard budgets or timelines (Reo 2019). If someone is truly interested in learning about and supporting these topics and issues, then this should be a lifelong experience.

While this research was necessarily broad in scope, in order to contact as many Michigan tribes as possible, this was at times a fault. Focus always intended to be on environmental programming across Michigan, and while this is appealing, it is certainly better to develop a more honed approach in developing relations with tribes and research generally.

Resolutions

Through the course of this research, it is clear that tribal consultation must be improved to progress internal departmental goals and fulfil obligations State and federal entities have to

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tribal nations. Environmental programming by these tribes is already great, but increased capacity of consultation would free up resources and time for more environmental work, as well as provide tribes more sway in environmental issues.

A model was created to conceptualize and promote the environmental interactions that occur between tribes and outside entities (Figure 11). The 2007 Inland Consent Decree and Great Lakes Consent Decree were mentioned earlier, and issues with consultation have been emphasized throughout. Perhaps a model such as this could help fill in some of the gaps that are left by these decrees and the general need for better tribal consultation.

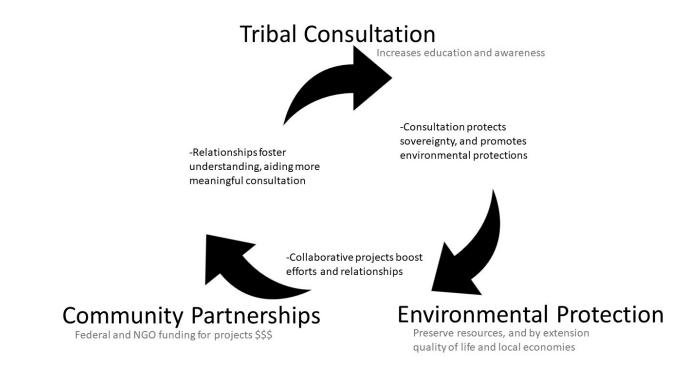


Figure 11: A model for promoting positive consultation and partnerships (Zachary Reed 2021)

While the Great Lakes Consent Decree is renegotiated every 15-20 years, the Inland Consent Decree was permanently established in 2007. This is significant because it stymies the future ability to adapt to changing perspectives, needs, and climate. While provisions exist that call for tribal consultation in Michigan, these obligations are not sufficiently fulfilled (GTB 2019). With more significant tribal consultation, better environmental protections and community partnerships, weaknesses of the consent decrees and consultation could perhaps be challenged. A recent positive development was the federal restoration of gray wolves to Endangered Species Status in February 2022 (Sierra Club 2022). As positive trends continue, the tendency will be continuous improvement to tribal consultation, collaboration, and environmental protection.

Meaningful consultation and collaboration for Michigan tribes should be improved. Collaboration can be cultivated through personal relationships, developed for the overt purpose of aiding tribes. Tribal consultation can be improved through increased funding, clearer definitions, and respect of Indigenous spirituality.

As far as partnerships and collaborations go, both LRB and GTB underscored the importance of positive collaborations that directly support tribes. LRB employees noted their positive relationship with Grand Valley State University and Central Michigan University, and also expressed possible future interest in working with Western Michigan University or other institutions. While these partnerships can be mutually beneficial, it is important to note that these types of relationships should really be supportive rather than extractive of Indigenous tribes. Rather than simply academic inquiries, it would be beneficial to directly support tribes. Academics should ask what they can do to help tribes, rather than what tribes can do for academia.

More meaningful consultation could occur if tribes are listened to wholeheartedly, and not simply given a seat at the table in some cases. In future proposed wolf hunts, pipeline

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decisions, and other social-ecological issues, tribes' viewpoints should be fully considered and incorporated into decision making. Another serious aspect of consultation to respect is timeliness. Tribes should be given enough time to adequately consider issues that may affect them.

A possible remedy that would certainly increase the time tribes can spend on consultation is funding. While the federal and Michigan governments have large departments and deep pockets, tribes tend to operate on a much tighter budget. Providing tribes more funding to participate in consultation activities would increase the capacity of the departments, and thus hopefully increase their sway in environmental, social, economic issues and consultation broadly. This funding could come from the federal government, through grants or other means. Designating and funding a specific consultation manager could also help boost tribes' capacity to pursue better tribal consultation. A novel idea suggested by Employee B from the GTB Natural Resources Department was for an interdepartmental exchange program. Such an exchange could place tribal employees in U.S. government positions, and vice versa. This could foster more meaningful collaborations, relationships, and progress in consultation.

Additionally, simply having a clear definition of tribal consultation is important to refining the process. Michigan tribes are currently working together to define what tribal consultation should look like. In the future, with more of a clear structure, tribal consultation can better fit the needs of Michigan tribes. A draft Consultation on Resource Management Policy was provided by the GTB, offering some suggestions for improvements to the consultation process (GTB 2019). This included suggestion for defining consultation, as the term itself is vague, leading perhaps to some of its ambiguous nature.

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To truly make gains in tribal consultation and environmental issues, Indigenous spirituality should be respected. In some sense, this spirituality and traditional ecological knowledge that is practiced by tribal departments should be incorporated into the process of consultation. If all stakeholders truly consider their place in the world, and the way the environment will be affected seven generations down the line, then tribal perspective would become de facto policy. Policies and decisions we make today have a real and lasting impact on our environment and lives. These decisions become even more important for our descendants, who will have to deal with the impacts on climate and environment, issues we already struggle with today. Drawing from this deep ecological and spiritual knowledge, much less harm should be done to the environment, native species should be respected, and the holistic health of our world should be emphasized.

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Appendices

Appendix A: IRB Approval

WESTERN MICHIGAN UNIVERSITY Human Subjects Institutional Review Board

Date: February 25, 2021

To: Lucius Hallett, Principal Investigator Zachary Reed, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair

Amy Naugle

Re: Approval not needed for IRB Project Number 21-02-47

This letter will serve as confirmation that your project titled "Tribal Environmental Protection in Michigan" has been reviewed by the Western Michigan University Institutional Review Board (IRB). Based on that review, the IRB has determined that approval is not required for you to conduct this project because you are not collecting personal identifiable (private) information about individuals and your scope of work does not meet the Federal definition of human subject.

45 CFR 46.102 (e) Human Subject

(1) *Human subject* means a living individual **about whom** an investigator (whether professional or student) conducting research obtains:

(i) Obtains information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes the information or biospecimens; or (ii) Obtains, uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens.

(2) Intervention includes both physical procedures by which information or biospecimens are gathered (e.g., venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. (3) Interaction includes communication or interpersonal contact between investigator and subject. (4) Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information that has been provided for specific purposes by an individual and that the individual can reasonably expect will not be made public (e.g., a medical record). (5) Identifiable private information is private information for which the identity of the subject is or may readily be ascertained by the investigator or associated with the information. (6) An identifiable biospecimen is a biospecimen for which the identity of the subject is or may readily be ascertained by the investigator or associated with the biospecimen.

"About whom" – a human subject research project requires the data received from the living individual to be about the person.

Thank you for your concerns about protecting the rights and welfare of human subjects. A copy of your protocol and a copy of this letter will be maintained in the IRB files Alwood Hall, Kalamazoo, MI 49008-5456 PHONE: (269) 387-8293, TAX. (269) 387-8293. Appendix B: Research Interview Questions

Broad

How does the proximity to rivers, Great Lakes, forest, or specific resources like wild rice inform environmental initiatives?

What are the current issues facing the Tribe and the land base?

What Tribal or environmental issues would the Tribe most like see brought to light to a public audience?

Is there anything that would be important for me and the broader public to understand about tribal environmental programming?

How can young people be more involved and educated about tribal issues and issues of environmental protection, climate change, etc.?

What words or phrases would you use to describe the Tribe's relationship with the State and other organizations in terms of environmental consultation/protection issues?

What would the Tribe like to see included emphasized in research or general knowledge? What topic or issues specific to the Tribe or broader needs light shed on?

Has there been a lot of growth in the department(s) since it's inception? How has that growth been like? Has there been a proliferation in programs, etc.?

Importance of native vs nonnative species?

Consultation

Can you define Tribal consultation in the department's view?

What is the departmental perception of Tribal consultation?

Are there any ways that Tribal consultation could be improved?

Can you share an example of a failure of consultation?

Can you share an example of a successful Tribal consultation?

Can it be difficult for Tribes and state/federal agencies to work collaboratively?

How to best consult with Tribes? What can be the differing perspectives on consultation (veto power? Seat at the table?)?

How important is money and budget in programming and consultation?

How do power dynamics and paternalism of the federal gov. play into consultation?

Why don't EGLE or the State give up power?

How much time does meaningful consultation take?

What is the current state of Tribal consultation and what is the ideal state of Tribal consultation?

Collaboration

What are some examples of collaborative projects within the Tribe?

Have there been collaboration on environmental issues with the State, federal agencies, or NGOs?

What have been the best partners for the Tribe to work with?

Have there been collaborations between other Tribes?

How could collaboration between Tribes improve, and is this a desired outcome?

How could collaboration between federal or State agencies improve?

What have been the greatest successes in collaborative projects?

Have there been any downfalls or issues with collaborative projects?

Appendix C: Selected Anishinaabek Translations

Love- Gaazhwenimowin

Respect- Minaadendimowin

Courage- Aakide'ewom

Honesty- Gwe'ekwaadiziwin

Humility- Dibaadendiziwin

Truth- Debwewin

Wisdom- Nibwaakaawin

(Bay Mills Community College 2021)

The Seven Grandfather Teachings- Niizhwaaswi Mishomis Gikinomaagewinan Eagle- Migizi Bear- Makwa Bear cub- Makoons Love- Zaagidiwin (see 'love' above) Bravery- Aakodewin (see 'courage' above) Grandfather- Mishomis Grandmother- Nokomis Thank you- Miigwech See you later- Baamaapii Tobacco- Sema Creator- Gizhe Manidou

(GTB Communications 2021a, GTB Communications 2021b)

Sturgeon- Nmé (McClurken 2009) Arctic Graying- Nmégos (Little River Band of Ottawa Indians 2020)

Wild Rice- Manoomin (Sault Tribe 2020b)

Appendix D: Consent Form

Western Michigan University

Department of Geography, Environment, and Tourism

| Principal Investigator: | Dr. Lucius Hallett, IV |
|-------------------------|---|
| Student Investigator: | Zachary Reed |
| Title of Study: | Tribal Environmental Protection in Michigan |
| | |

You are invited to participate in this research project titled "*Tribal Environmental Protection in Michigan.*"

STUDY SUMMARY: This informed consent form is part of the process for a research study that will provide information that will help you decide whether you want to take part. Participation in this study is completely voluntary. The purpose of the research is to: Catalogue tribal environmental protection efforts in Michigan and will serve as Zachary Reed's Thesis for the requirements of the Master's degree in Geography at Western Michigan University. If you take part in the research, you will be asked to participate in a collaborative virtual interview. Your time in the study will take 1-4 hours depending on time constraints and depth of conversation. Possible risk and costs to you for taking part in the study may be the time to complete survey and potential benefits of taking part may be the creation of a collaborative knowledge base about tribal environmental protection efforts across Michigan. Your alternative to taking part in the research study is not to take part in it. You may also direct the research to the appropriate person.

The following information in this consent form will provide more detail about the research study. Please ask any questions if you need more clarification and to assist you in deciding if you wish to participate in the research study. You are not giving up any of your legal rights by agreeing to take part in this research or by signing this consent form. After all of your questions have been answered and the consent document reviewed, if you decide to participate in this study, you will be asked to sign this consent form.

What are we trying to find out in this study?

This study seeks to find out specific information on tribal environmental protection efforts in Michigan, and future actions and relationships that would support such work. It would be beneficial to have detailed information about the environmental initiatives of each tribe in the state, but this will not simply be a catalogue of facts.

Developing an understanding of the relationship between tribal, state, and local environmental agencies will underscore positive or negative aspects of this relationship. This study seeks to find these details of environmental protection and address future tribal goals and actions that will support those goals. We are trying to understand the environmental protection efforts of tribes in Michigan, and how can their goals be supported across the State.

A third interrelated purpose of this study is understanding the spatial environmental resource uses and distributions of tribes in Michigan. Understanding how the proximity to rice beds, rivers, the Great Lakes, fishing and hunting, etc. informs specific environmental initiatives is an important piece of this research. Understanding differences between tribal land bases also could help determine future positive environmental actions.

Who can participate in this study?

The participants in this study will be individuals working in the natural resource or environmental departments in tribal organizations through the State of Michigan, and tribal members or associates directly referred by the tribal organization. The inclusionary criteria is anyone who is working at an environmental/natural resource department in a tribal organization, or referred by the tribal organization, and over the age of 18. Departments will be accessed from the respective sites of the tribes with which they are associated.

Additionally, representatives of the 4 State recognized tribes in Michigan may also be interviewed for perspectives on environmental and Indigenous issues broadly.

Where will this study take place?

Due to the ongoing Covid-19 pandemic, in-person interviews will be assumed to be unfeasible throughout the duration of this project. If current conditions change, a shift to in-person interviews will be preferred if possible, dependent on the discretion of Western Michigan University, the researcher, and tribes involved. In lieu of in-person interviews, interviews will be conducted over webcam via the WebEx. Recording interviews will be preferred, but interviews will be recorded at the interviewees' discretion, to aid in the promotion of collaboration and trust.

What is the time commitment for participating in this study?

The time commitment is simply one interview, which may last from 1-4 hours depending on time and depth of conversation.

What will you be asked to do if you choose to participate in this study?

Participants will be asked to respond to a series of questions which are intended to facilitate a collaborative discussion and conversation about environmental protection.

What information is being measured during the study?

The information that is being measured are the specific details of environmental protection efforts of Michigan tribes. Any information that has to do with tribal environmental protection, and any other relevant information that comes up during the natural course of conversation will also be assessed.

What are the risks of participating in this study and how will these risks be minimized?

The major risk of participating in this study is time commitment. Another risk is the potential that some questions could be difficult to answer. The risk of time will be minimized by allowing for the flexibility in time commitment. Participants do not necessarily have to participate for 1-4 hours; any collaboration is gladly welcomed. Another risk mitigation will be the review of interview information with subjects. Recordings or summaries will be sent to participants to ensure that no information was included that the participant did not want in the final research.

What are the benefits of participating in this study?

Participants may benefit from this study through the creation of a collaborative knowledge base about tribal environmental protection in Michigan. This knowledge base may serve to educate individuals and organizations across the State of Michigan about the great efforts made by tribal environmental departments. This could also potentially serve as inspiration for future environmental protection efforts in better cooperation with the State. This study may also be beneficial for participants as a platform to discuss environmental issues and goals.

Are there any costs associated with participating in this study?

There are no monetary costs associated with participating in this study.

Is there any compensation for participating in this study?

There is no compensation associated with participating in this study.

Who will have access to the information collected during this study?

The final thesis will be posted online on WMU's website. A final copy of the thesis will be distributed to participants. Journal submission may be made after the study, including to American Indian Quarterly.

What will happen to my information or biospecimens collected for this research project after the study is over? Using only one of the 3 statements in quotations below, describe how data from this study may be used for future research and/or sharing of data and specimens with another institution. (Required under 45 CFR 46). All information collected for this study will be kept in a box under lock and key in Dr. Lucius Hallett's office for no less than three years.

Remove *italicized*/red text, as appropriate.

• "The information about you for this research will not be used by or distributed to investigators for other research."

What if you want to stop participating in this study?

You can choose to stop participating in the study at anytime for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study.

The investigator can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact Dr. Lucius Hallett at (269) 387-3407 or lucius.hallett@wmich.edu or the student investigator at Zachary Reed at 715-797-0998 or zachary.m.reed@wmich.edu. You may also contact the Research Compliance Office at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

Participating in this survey online indicates your consent for use of the answers you supply.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant's signature

Date