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Abstract:

Historically we have denied and stolen the Native rights and culture. This continues today and is debatably a global human issue. Our current damaging and negative environmental actions are no exception to this problem. The fight between corporate and capitalist america and the environmental movement is one that catches not only the Native American people, culture, and philosophy in the crossfires but philosophy continues to ignore basic human rights. This thesis explores the impacts and implications of the uses of unsustainable resources, like oil pipelines, in relation to cultural and environmental impacts. This impact extends past the historical wrongdoings of the nation. It reaches to continue to affect cultural denial through inequality of rights by policies today and basic environmental impacts through the native philosophical perspective. In Chapter 1 I present the quantitative data of various natural science studies, showing both the environmental and health effects of oil pipelines. In Chapter 2, I explore history between Natives and the United States Government, highlighting the legal and political history which this repetitive injustice was built on. In Chapter 3, I explore the significant participation Native Americans in this environmental justice issue, utilizing a philosophical perspective. Chapter 4 expands on the contents of the previous chapter, focusing specifically on the topic of legal and political struggles that are faced based on these issues of environmental justice and applicable philosophies. Chapter 5 concludes by contrasting past policies with current ones and changes in political actions which can bring about solutions with consideration of the historical and philosophical differences in perspective. This thesis explores the history of political relations through an environmental and philosophical perspective in a current situation.

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Introduction. Repeating History: Fight against Line 3 (Word count: 554)

On September 28, more than 1,200 people gathered in Duluth Minnesota to protest the new Line 3 oil pipeline, a gathering known as the Gichi-Gami Gathering, which is what the Native people know the shores of Lake Superior as. They are fighting against the people who consistently ignore them, calling to protect their water and land in a way that aligns with the philosophical values towards their land. This story mimics the conflict at Standing Rock fighting against the Dakota Access Pipeline.

The conflict between the Native people and politics brought about by the proposal of a new Line 3 oil pipeline, is a clear presentation of the inequality imposed by political government action and western perspective. Line 3 is a proposed expansion to an existing oil pipeline which travels from Alberta, Canada to Superior, Wisconsin. The Canadian pipeline company who proposed this expansion, Enbridge, is looking to move the pipeline through the wetlands of the Anishinaabe peoples. This land is treaty territory to the Anishinaabe peoples and is a significant source of wild rice farming. With current environmental issues as a prominent concern not only today but for our future generations, the installation of a new oil pipeline while leaving the remnants of the old pipeline only contributes to the negative climate effects. Not only would this pipeline contribute more negative effects than positive by fostering an energy industry that should be replaced with a more sustainable resource, but it is directly harming the indigenous people and environment in a number of ways. Not only does Line 3 violate the treaty rights of Anishinaabe people by infringing on potential environmental harm to the watersheds in which the people rely on for wild rice, but contributes to the historical pattern of theft towards the indigenous people.

The conflict of the new Line 3 pipeline presents various components of context to the situation, from historical background to philosophical perspective; this is an issue that requires an interdisciplinary perspective. The repeated violation of treaty rights is a prominent aspect that is seen as a historical significance to the indigenous culture such as the Boarding School Era. The events of proposing a new Line 3 shows a lack of perspective towards the environment, which can be understood through Native philosophy. All of this is shown with an overall context to politics and made policies regarding Line 3.

In chapter 1, I will provide an overview of the political timeline surrounding the proposed updated Line 3 oil pipeline. Additionally, the chapter will include the quantitative data surrounding the environmental and health effects that oil pipelines can often create. In chapter 2, a historical context to the indigenous rights and treaty violations will be discussed. Chapter 3 will explore the specific conflict as an environmental justice issue with context to the values of prominent Native American philosophies. This chapter will additionally present up prominent components of the Line 3 oil pipeline as a case study in relation to the general conflicts of a national lack of recognition of Indigenous rights. In chapter 4, the political dimension of specifically Line 3 will be explored using the context of the previous chapters. This section will be continued in the final chapter, chapter 5, which will examine and recommend solutions to the political and societal issues that surround this environmental problem.

Chapter 1. From Oil to Soil: Data of Pipelines (word count: 3426)

An essential part of analyzing any environmental condition is taking into account the relationship between the ecosystem, whether it be in a localized or global perspective, and the human well-being. There is a very strong and significant connection between the two that is

represented through ecosystem services. In a general sense, ecosystem services are the various

benefits that we experience from the ecosystem. The benefits are categorized into provisioning

services, regulating services, cultural services, and supporting services. Provisioning services are

those that are directly obtained from the environment. This includes items like food, water, or

timber. Regulating services moderate the natural processes of the environment like water quality,

flooding or wastes. Cultural services provide spiritual, aesthetic, educational or recreational

benefits. Supporting services are services that are necessary for the processes of all other

ecosystem services. These can be things like nutrient cycling, oxygen production or

photosynthesis, or water cycling. There is a significant influence from ecosystem services on the

benefits that people receive. This overall makes people extremely dependent on them, despite

any influence from technology or societal and cultural changes. Additionally examined further in

chapter 5 with policy and decision making, this makes ecosystem services a very critical

component for the analysis of any environmental concern. The environment, and ecosystem

services by extension, have a great influence on human well-being. According to the Millenium

Ecosystem Assessment,

> Human well-being is assumed to have multiple constituents, including basic
> material for a good life, such as securing adequate livelihoods, enough food at all
> times, shelter, clothing, and access to goods; health, including feeling well and
> having a healthy physical environment, such as clean air and access to clean
> water; good social relations, including social cohesion, mutual respect, and the
> ability to help others and provide for children; security including secure access to
> natural and other resources, personal safety, and security from natural and
> human-made disasters; and freedom of choice and action, including opportunity
> to achieve what an individual values doing and being. Freedom of choice and
> action is influenced by other constituents of well-being (as well as by other
> factors, notably education) and is also a precondition for achieving other
> components of well-being, particularly with respect to equality and fairness.
> (Millenium Ecosystem Assessment 2005)

Our environmental outcome resulting from environmental issues is formed from a basis of our perspective as humans towards the environment, as further looked at as philosophical values in chapter 3, coupled with both the environment itself and the ecosystem services it provides. With people being a significant influence on and component of the workings of an ecosystem, there is a noteworthy human influence, both directly and indirectly, to the ecosystem services and therefore human well-being. As indicated by the Millenium Ecosystem Assessment, related to the strong connection between human well-being and ecosystem services, "social, economic, and cultural factors unrelated to ecosystems alter the human condition, and many natural forces influence ecosystems" (Millenium Ecosystem Assessment 2005). These values, which can be attributed as intrinsic values, can be greatly attributed to environmental issues with relation to human influence which is applicable to the case studies and specific scenarios examined in this paper.

Specifically looking at wetland ecosystems, there is a specific and significant value that these ecosystems hold in relation to the concept of ecosystem services. Wetland ecosystems ultimately include lakes, rivers, marshes, and coastal regions that have a depth of about 6 meters during low tides. These habitats are estimated to take up more that 1,280 million hectares; a size that can be related to about 33% larger than the United States despite under-representing many wetland types (Millenium Ecosystem Assessment 2005). During the twentieth century, it is known that more than half of wetland ecosystems in North America, Europe, Australia, and New Zealand were lost, while many others in various areas of the world continue to be degraded. These habitats hold high economic benefits through the "wide range of ecosystem services that contribute to human well-being, such as fish and fiber, water supply, water purification, climate regulation, flood regulation, coastal protection, recreational opportunities, and, increasingly,

tourism" (Millenium Ecosystem Assessment 2005). Wetland ecosystems provide a wide range of functions that benefit human well-being and poverty alleviation, as seen directly through the examination of ecosystem services. Some people, particularly those who live near wetlands, rely heavily on these services and are directly damaged by their destruction. The overall economic worth of untouched wetland habitats are consistently higher compared to those ecosystems that have been coveted when both the marketed and non-marketed economic advantages are considered. Despite this, wetland ecosystems are studied to have the highest rate of loss and degradation than other ecosystems. It has been shown that the main indirect driving causes of this rapid degradation rate is attributed to "population growth and increasing economic development" while the direct causes can be attributed to "include infrastructure development, land conversion, water withdrawal, eutrophication and pollution, overharvesting and overexploitation, and the introduction of invasive alien species" (Millenium Ecosystem Assessment 2005).

Wetland ecosystems play an essential role in regulating the processes that contribute to global climate change by taking up and storing a large fraction of carbon in the atmosphere. While comprising only about 3 to 4% of the global surface area, "peatlands are estimated to hold 540 gigatons of carbon, representing about 1.5% of the total estimated global carbon storage" with about 30% of that held in plants and soil (Millenium Ecosystem Assessment 2005). As the degradation and loss of wetlands continue, as they are projected to, the ability of these habitats to mitigate the impacts of climate change is additionally lost. This will contribute to things like furthering the reduction in human well-being, increasing the prevalence of disease, and creating an exponential increase in demand for ecosystem services "such as denitrification and flood and storm protection" (Millenium Ecosystem Assessment 2005). This is especially true for

low-income countries where "technological solutions are not as readily available" (Millenium Ecosystem Assessment 2005).

However, these effects will tie into the negative consequences of climate change and play into them. Issues such as sea level rise, coral bleaching, and changes in hydrology and water temperature, will reduce those services and benefits that wetland ecosystems offer. According to (Millenium Ecosystem Assessment 2005), Global climate change is projected to exacerbate the loss and degradation of many wetlands and their species including harm to the human populations that are dependent on their services.

In 1896, the idea of globally human-caused climate change was brought to light when Svante Arrhenius, a Swedish physicist, theorized that the release of carbon dioxide from burning fossil fuels like coals or oil affected the climate and its environmental processes (Jamieson 2009). These gases, termed greenhouse gases due to their ability to retain thermal radiation emitted from the surface of the Earth through a greenhouse-like process, can remain in the atmosphere anywhere from a century to a millennia. Since there is such a lengthy lifespan on these gases, their effects will be experienced for a long time. "Even if all GHG emissions ceased immediately, there would be at least another 0.7 degree Celsius of warming in addition to the 0.8 degree Celsius of warming that already has occurred" (Jamieson 2009). As it stands now, greenhouse gas emissions are not predicted to cease immediately in any regard.

Any kind of rapid global warming, including what has already occurred, will cause damage to both people and nature, as shown minimally through specific wetland data. Nevertheless, once the 2 degree Celsius benchmark is exceeded, the damage becomes pervasive, significantly more intense, and overall increases a catastrophic climate change. In relation to

wetland ecosystems, the most effective strategy of dealing with the negative consequences of climate change is to remove existing pressures on wetlands and improve their resilience.

In the past, there have been clear examples of how oil pipelines like the new proposed Line 3 pipeline directly subjects the people in nearby areas to an unfair distribution of pollution and therefore create severe health effects. The Keystone XL pipeline, which was a proposed pipeline extension, has been proven to have caused numerous health effects for those around it. Proposed by TransCanada in 2008, the extension would add two components to the original pipeline to create a more direct path of transportation. The whole pipeline, with the extensions, would follow a path from Hardisty, Alberta to Houston, Texas. Having gone through a similar back and forth fight as Line 3, the Keystone XL Pipeline has caused nearby areas like Ponca City to be subjected to an increase in toxic emissions from the tar sands. Concerns of health effects due to the pipeline in nearby areas were raised but in 2009 they were closed by the Alberta College of Physicians and Surgeons. "That same year, the Alberta Cancer Board released a report that found elevated cancer cases" in the surrounding areas as the original Keystone Pipeline (Cryderman 2014). For those in the surrounding area of an oil pipeline, especially one of tar sand which is a highly toxic combination of chemicals, there are increased health risks like extreme lack of air quality and development of cancer. According to a report from the Minnesota Department of Commerce, "when tar sand is exposed to the air, the harmful chemicals that are used as diluents evaporate into the air forming heavy toxic clouds close to ground level" (Phillips 2017). The company claimed that Keystone "will be the safest and most advanced pipeline operation in North America" (Phillips 2017). Later, when the U.S. Department of State Final Environmental Impact Statement was released, the statement which examines and considers the effects of a spill by the KXL, it indicated that "pipeline spills are inevitable, particularly smaller

ones''(Sherval 2015). The report estimated that ''the Keystone XL pipeline will leak an average of 518 barrels of oil per year'', all despite monitoring systems and other leak-prevention technology put in place by the TransCanada Energy Company (Sherval 2015). According to the U.S. EPA, there have been about 4.3 million oil spills all of which have put more than 100,000 gallon of oil into the surrounding environment between 1980 and 2004, "with an average of 8 million gallons spilling annually into U.S. waters (Sherval 2015). In looking at the health effects that residents have already shown, it just exemplifies the detrimental effects that all pipelines have despite how safe or reliable we construct and believe them to be.

Reasonably, native communities, who hold rights to the land of the planned KXL pipeline path, feared the inevitable consequences they would be forced to face given the pipeline expansion. Considering the massive repercussions of the Deepwater Horizon oil spill in the Gulf of Mexico in 2010, as well as the Enbridge pipeline spill the following year in 2011, which resulted in an estimated 877,000 US gallons of oil sands flowing into the Kalamazoo River near Michigan, many people are concerned about the possibility of an oil spill near fresh water sources such as the Ogallala Aquifer in Nebraska's Sand Hills region (Kalamazoo). According to an assessment filed with the Minnesota PUC, Enbridge states that "the worst-possible oil spill along Line 3 would cost up to $1.4 billion" (Lovrien 2018). This pipeline has already had four serious incidents since being built. Almost 20 years after the first Line 3 was built, a seam split caused 449,000 gallons of oil to spill in Minnesota. Later, the United States largest inland oil spill, spilling about 1.7 million gallons of oil near the Grand Rapids, happened when workers from Enbridge missed an alarm signal on Line 3. A rupture in the original Line 3 spilled 6,000 barrels of oil into wetlands in Minnesota, a situation that could be mirrored with the new proposed Line 3. The pipeline threatens both the land that the Native people closely depend on,

and both their health and livelihood. According to the Canadian government's own data, the development of Alberta's oil sands is the fastest-growing source of greenhouse gas emissions in Canada (MacLean 2015). To showcase that, the Energy East oil pipeline, a TransCanada proposed oil pipeline that was denied production; if built, would have added a third to the capacity of Canada's existing oil pipeline network. The pipeline would have considerably enhanced access to foreign markets for oil sands producers. As a result, this would have made " the economics of oil sands production more compelling" and contributed to increased greenhouse gas emissions and environmental degradation (MacLean 2015). Similarly, opponents of the Keystone XL pipeline argue that extending the use of oil sands through these pipelines will not only worsen the significant impact of climate change, but will also pose severe and unacceptable threats to aquifers and local animals, as well as further the societal dependence on fossil fuel energy rather than following the inevitable shift toward more sustainable energy and resource options. In Canada, while the federal government is allotting 281 million Canadian dollars over five years in renewable clean energy technology over five years, there is obviously an inconsistency in its commitment to renewables when compared to the projected 2.8 billion Canadian dollars offered in subsidies and tax benefits for oil sands businesses (Sherval 2015). As suggested by Homer-Dixon, the two global problems that we are facing in our world today are "those of climate change and peak oil", proving really to be one issue (Sherval 2015). By promoting this dependency on oil and oil extraction, national governments are effectively preventing the transition and investment in more renewable energy sources. In looking at the health effects that residents have already exhibited, it confirms the detrimental effects that all pipelines have despite how safe or reliable we construct and believe them to be.

This situation of increasing corporate and political attention to increasingly fund the dying oil energy takes this resource into a perspective of security, and as such, it will greatly influence surrounding energy policies and how they are implemented. Specifically, framing this industry as requiring a demand for more resources causes tensions throughout both the world and national governments whose economies are dependent on an uninterrupted supply of this product. This allows for a perspective of catastrophic repercussions for society without this particular market. Ultimately this builds the inclination for governments to venture new areas for greater quantities of this resource. Some future possibilities for North American energy security, in particular, consist of the exploration of new oil sources as well as the transportation of those resources to both regional and worldwide markets (Sherval 2015). While oil within the Arctic has been known since the eighteenth century, it is present in the form of whale oil within the ocean floor rather than land. Accessing this oil in the sea of the Arctic North was and still continues to be a costly and difficult endeavor. Once regarded to be of little economic value, new geological investigations indicating that the Arctic might possess approximately one-fifth of the world's remaining undeveloped hydrocarbon resources have boosted interest in the region from both big energy firms and surrounding nation states (Sherval 2015). All five of the nations bordering the Arctic, being Canada, Russia, the United States, Denmark, and Norway, are taking immense steps to reaffirm their historic claims of the land. Canada in particular is trying to preserve their interests in the region. This is a direct indication of the contradicting path that the future of oil sand energy holds. On one side, oil sands are seen as a necessity for the declining oil reserves and insecurity. On the other, it serves as an industry that can "dramatically increase global warming, wreck vast areas of boreal forest and override the customary practice treaties of traditional owners" (Sherval 2015). The oil sands in Alberta have drawn significant attention

from both national and international scrutiny. One argument being the Alberta oil sands could make a significant contribution to the provincial and Canadian economies, predicted to contribute over $1 trillion to the Canadian economy and support more than 205,000 direct and indirect jobs across Canada (Millington, 2019). With Canada's unique combination of enormous undiscovered reserves, a stable political climate, and a willingness to invest in the oil sands sector today, Canada is predicted to become the world's fourth-largest oil producer by 2035. Since 1980, thes output and production of oil sands in northern Alberta has expanded fifteen fold from 100,000 barrels per day to 1.5 million barrels per day (Sherval 2015). However, it holds true that "without sufficient investment in ways to reduce consumer demand and find alternate sources of energy, a major decline in the global production of conventional oil will occur" (Sherval 2015).

There is large opposition to the significant environmental costs associated with extraction of those oil sands in Alberta. Unlike more common oil reserves, the Alberta oil sands consist of a mixture of bitumen oil and quartz sand. Based on the depth of the reserve, there are two techniques used to extract the oil. Those near the surface use a method of open-pit mining to access the oil. In these methods "oil sands are mined and then trucked to processing areas where the oil sands are crushed, diluted with hot water, and pumped to an extraction plant" (Natcher, Brunet, Bogdan, et al., 2020). The oil has to be separated from the sand, which is done at the extraction plant, by adding hot water which forces the oil to the surface. According to the processes of this technique, it can be estimated that about 2 tons of sands is required to produce one barrel of oil sands crude. For oil sand deposits farther than 75 meters, the extraction method includes injecting pressurized steam underground allowing the oil to be pumped to the surface. "The benefits of SAGD and CSS systems over mining include gaining access to deeper, harder to

reach reserves while reducing the overall industrial footprint" however, despite the method of

extraction, "critics argue that the environmental costs associated with oil sands development far

outweigh the economic gains" (Natcher, Brunet, Bogdan, et al., 2020). To counter this, the

Alberta Government makes the claim that there is little effect.

> The Alberta Government contends that oil sands activities have had a negligible effect on the environment and any sources of contaminant exposure are due to the natural release of bitumen inputs caused by seasonal erosion (Government of Alberta, 2019). The Alberta Government points to a number of independent scientific studies to support their claims. These include the findings of Swart and Weaver (2012) who determined that the warming effect from burning all of Alberta's known oil sands reserves would be nearly undetectable, with an estimated increase in temperature of between 0.02 to 0.05 C. In terms of water contamination, Shotyk et al. (2017) detected no elevated concentrations of toxic metals in the Athabasca River. Their findings have been further substantiated by Owca et al. (2020), who similarly found no evidence of substantial oil sands-derived metals in the sediment of lakes supplied by the Athabasca River. Based on these findings, the Alberta Government claims the environmental impacts of oil sands development are so negligible that they should be of little public concern. These conclusions have, however, been challenged by other researchers (e.g., Timoney and Lee, 2009; Rooney et al., 2012; Campbell et al., 2020) whose findings contradict the province's benign claims (Busato and Maccari, 2016) and suggest that public concern is very much warranted (Schindler, 2010). (Natcher, Brunet, Bogdan, et al., 2020)

While discussion remains among the academic research community, those Indigenous

locals living in the oil sands regions argue that, rather than having minimal effects, oil sands

development is having a negative influence on the ecosystem and their own health.These

observations include "changes in water quantity and quality, as reflected in changes in water

color and taste, more frequent appearances of surface scum, and higher levels of algae growth

along waterways"(Natcher, Brunet, Bogdan, et al., 2020). This has additionally included "more

frequent cases of deformities being found on fish and their internal organs (e.g., sores, cists),

smaller and skinnier fish being caught, and general changes in their color, taste and texture

(Natcher, Brunet, Bogdan, et al., 2020)". These environmental conditions have been directly

linked to Indigenous inhabitants' worsening physical and emotional health. However, due to the government having failed to validate Indigenous residents' findings, and in some cases have been disputed by the Alberta Government's own studies, Indigenous peoples' concerns are frequently rejected as anecdotal or simply non-representative. (Natcher, Brunet, Bogdan, et al., 2020).

Chapter 2. History of Injustice (word count: 3690)

In the simplests perspective and terms, the United States is a nation built on stolen land. The boarding school era was a time in which the United States government created boarding schools for young Native American children in order to force assimilation. During the Boarding School Era in the late nineteenth century, a time in history that is greatly unknown to many people, the culture of Native children was beaten out of them and they were forced to assimilate to white, christian culture. By the mid-1800s, American expansionist sentiments had resulted in extensive policies to remove American Indians, with tens of thousands of Indigenous Americans removed from their traditional homelands. The US government launched a measure of systematic assimilation through boarding school programs, during which thousands of children were abducted from native villages and placed in non-Indian-run residential schools (Evans-Cambell, Walters, Pearson, et al., 2012). When there was resistance from parents to letting their children be taken away from their homes, Congress authorized the Commissioner of Indian Affairs "to make rules to ensure attendance, and provided funding for the transportation of children from reservations to boarding schools" (Haag 2007). This only led to things like kidnapping and the government withholding rations to coerce parents into sending their children away. Later on, with the Indian Removal Act of 1830, also known as the Trail of Tears, the United States government ordered all of the Native people off of their tribal land and herded

them together onto reservations despite signed treaties that granted them national sovereignty. This journey caused "the loss of ancestral homelands and 15,000 deaths from exposure, disease, and starvation" (Prine 2019). Simply put, "over successive generations, native people have experienced community massacres, forced relocation, and prohibition of cultural practices (Evans-Cambell, Walters, Pearson, et al., 2012).

This time period predominantly occurred between 1880 to 1930 and today has been termed the 'US Boarding School Era' as an increasing number of indigenous American children were forced into off-reservation boarding schools. By 1930, approximately half of all native children were enrolled in schools typically located anywhere from hundreds to thousands of miles away. Students were barred from engaging in cultural activities or speaking their native languages at school, and were subjected to heavy punishment if they did. Instead, kids were forced to adopt new ways of life in an institutional setting. Child abuse and neglect were prevalent in these schools, while and cultural disruption was severe (Evans-Cambell, Walters, Pearson, et al., 2012). School instructors shaved the children's hair, changed their clothing, diets, and names. They replaced tribal languages and rituals with "English, Christianity, sports activities, and ritual calendar intended to further patriotic citizenship" (Davis, 2001). The children were taught industrial and home skills relevant to European American gender norms causing homesickness, anger, and alienation through this cultural onslaught (20). These schools followed mottos like "Kill the Indian, and save the man". The average age of those entering boarding schools was 10 years old and these children could spend anywhere from four to twelve years in these institutions (Evans-Cambell, Walters, Pearson, et al., 2012). The boarding schools, intended to eliminate the Native cultures, have become an integral part of the Native American

identity creating a drive for both political and cultural self-determination as these boarding schools served as places of both cultural loss and persistence (Davis, 2001).

Although there is a limited but increasing number of literature on the occurence and prevalence of sexual abuse of Native American children during this time, as well as the challenges in determining the scope and extent of such abuse, there is almost no literature on the diagnosis or evaluation of the impact of sexual abuse on Native American children (Irwin, Roll, 1995). Native American children are encompassed by an entirely different world view which may affect the nature and extent of the impact of sexual abuse. The general assumptions of Native American belief systems include the beliefs that "humans are three-fold beings made up of spirit, mind, and body; that the spirit world exists side-by-side with, and intermingles with the physical world; that illness affects the mind and spirit as well as the body" (Irwin, Roll, 1995). The idea that a violation of the body must certainly involve a violation of the spirit is one of the implications of these beliefs for victims of sexual assault. Native Americans are a conquered minority, and the frequency of alcohol consumption disorders, as well as high morbidity and death rates, may generate extra vulnerabilities to the traumatic experience of abuse (Evans-Cambell, Walters, Pearson, et al., 2012). In addition, "many indigenous societies in North America have historically acknowledged and incorporated the existence of diverse gender and sexual identities among community members" (Evans-Cambell, Walters, Pearson, et al., 2012). Referred to as two-spirit, colonialism, specifically during the Boarding School Era, has had particularly negative cultural effects on two-spirit groups, diminishing traditional roles and cultural acceptability. Missionaries at boarding schools and government agents on reservations imposed rigorous conformity to European and Christian norms, including the restriction of traditional traditions and strict gender roles (Evans-Cambell, Walters, Pearson, et al., 2012).The

imposed denial of identity served a severe implication for two-spirit vulnerability with identity and mental health. The role of sexual abuse in causing subjective distress, increasing the likelihood of belonging to certain nosological categories such as depression, multiple personality disorder, borderline personality disorder, and increasing the likelihood of specific behavioral outcomes has all been investigated (Irwin, Roll, 1995).

Within the Boarding School Era however, the most well-known and prominent institution of this time for its horrific reputation is Carlisle Indian School in Pennsylvania. The Carlisle Indian School, goes a step farther in demonstrating the genuine impacts of exile, displacement, and fragmentation on the kids who attended, returned to their homes, and, in some cases, passed away. Indian School began a large-scale diaspora of Native children, and the cultural dislocation they experienced as a result of settler colonialism was rooted in Carlisle (Green, 2017). The town of Carlisle, located in Pennsylvania, is a notorious example of indigenous American land stifled and wrongly reformed by European colonization forcing the "developments of narratives advancing both the conquest and disappearance of Native people" (Green, 2017). From the political and governmental perspective, the creation of the Carlisle school was framed as a means of providing civilization to Western tribes. This was possible because Pennsylvania did not have reservations and federally recognized tribes. However, as it might have been written to "eliminate local racism, insularity and popular understandings", stories and essay exemplify how "local understandings allowed for marginalization of the students". Similar to many other Boarding School experiences, the students faced continued hardships even after returning home and not being able to fully adapt back into their original community. One of the most tragic parts of the Carlisle stories is the Carlisle Indian School cemetery. It serves as "one place to get the names of students who died and never returned" (Green, 2017). Carlisle also served as an

unfortunate leader for the formation of numerous other boarding schools across the country. Regardless of being in varied locations and across the country, all schools faced the same issues and followed the same systems. These institutions still sought children from all across the country and far from the childrens original home due to the fear from the repeated event of children escaping and trying to run away.

There is significant research and correlation between the tragic experiences that these children were forced to endure and problemed lifestyles including illicit drug use and extensive mental health problems. "Investigators have underscored the poverty, alcohol and drug use, considerable situational stress, and a variety of factors related to loss of cultural identity as important predisposing factors in the physical and sexual abuse of Native American children" especially that experienced while attending religious and BIA boarding schools (Irwin, Roll, 1995). The findings of many studies show that individuals who attended boarding schools were found to be more likely to have an alcohol disorder and "to have used illicit drugs more than once in the past year" (Evans-Cambell, Walters, Pearson, et al., 2012). Additiontionally, the students of boarding schools were found to be significantly more likely to have suicide attempts and suicidal thoughts.

Given the historical context of Native communities, it is not surprising that American Natives have the highest rates of mental health disorders in the United States. In one nationally representative sample of adults in the United States, "American Natives reported higher rates of frequent distress (14%) compared to the population in general (8%), whereas smaller studies have found rates of depression ranging from 10% to 30%. Rates of posttraumatic stress disorder (PTSD) are also higher among native adults (22%) compared to adults in general (8%)." (Evans-Cambell, Walters, Pearson, et al., 2012)

These issues are additionally not limited to those who were directly affected by the boarding school era. Reports have also shown that those raised by attendees of a boarding school are additionally more prone to form both drug and mental health issues. It was found that "people raised by boarding school attendees were significantly more likely to have a general anxiety disorder, experience posttraumatic stress disorder symptoms, and have suicidal thoughts in their lifetime compared to others" (Evans-Cambell, Walters, Pearson, et al., 2012). Although intergenerational traumatology is still in its early stages as a field of research, the studies suggest that the impact of large traumatic events like those of the boarding schools, can last for generations and that the trauma might appear in poor mental health in subsequent generations (Evans-Cambell, Walters, Pearson, et al., 2012). The issue unfortunately goes so much deeper than that statement however and is woven into the events of today. Native people have been abused from the beginning of our history as a nation.

There are additional records of political and legal conflict between the government and businesses, towards indigenous peoples and their land. Betrayal by the government through policy only feeds into the most prominent historical issue, being the repeated violation of treaty rights by the United States government which is further explored in chapter 4. In 1855, a treaty was signed between the U.S. Government and the coastal Pacific Tribes, known as the Point Elliot Treaty. This recognized the Native people as "independent and self-governing people" and acknowledged the area of their traditional homelands, which was from British Columbia to Seattle, as their own. "The treaty established reservations and access rights to usual and accustomed areas for tribal communities throughout the U.S. side of the Coast Salish territory" (Norman 2017). These rights eventually needed to further be upheld by a court case, known as the Boldt decision, when natives were being attacked and shot at for fishing on their land.

When the need for petroleum resources took off during World War II, there was a huge search for Native American resources through exploratory drilling of their land, typically in the Great Plains" (Rosier, 2003). This coupled with the westward expansion helped drive the demand for native reserves like coal, oil, and gas. This caused issues for the Native groups leading to continued conflict between the native people and the American government system. "After World War II, a new generation of Native American leaders began to work to strengthen tribal sovereignty and become less dependent on the federal government. The drive for autonomy included the important goal of making reservations appealing places to live and to work, places where tribal officials were at least fighting to create jobs and provide economic opportunity" (Rosier, 2003). Throughout this time, there are numerous examples of the government and legal systems stifling these chances at opportunity and agreement, and subsequently adding conflict between the parties. In the mid-1960s a deal was negotiated by the Bureau of Indian Affairs for coal mining leases for the Northern Cheyenne and Hopi groups. The agreement that was made showed the failure of the BIA to get a fair deal; they accepted offers of "$0.12 per acre with similar non-indian coalfields generating bids between $16 and $100 per acre" (Rosier, 2003). Similarly with uranium resources, the BIA failed to make fair agreements even going as far as the Peabody Coal Company assisting the BIA in misleading groups claiming that "nuclear power would soon make their coal reserves obsolete , making its low offer seem better than it was" (Rosier, 2003). In the 1940s and 1950s uranium mining began on the reservations but by 1970 when the negotiated leases expired, there was explicit damage done to both the environment and miners.

> Rates of cancer and respiratory ailments among Navajo miners were found to be
> very high; but nonminers also suffered health problems that continue to this day,
> including birth defects, because uranium tailings, byproducts of mining operation,

found their way into community water supplies and even materials used for building reservations homes. (Rosier, 2003)

The Anaconda Copper corporation on the Laguna Pueblo reserve in New Mexico is worth around $600 million over the time of its lease, which led to the establishment of the world's largest uranium mine. Despite employing hundreds of Pueblo miners, the firm abandoned the tribe with polluted water sources and land. An examination discovered that the firm had utilized low-grade uranium ore to construct roads going off the reservation, contributing to the irrigation of the Pueblo reserve. Within this deal which was negotiated by the BIA, there were no details on cleanup or secured provisions for damage like this which could have been caused. In addition to this, there were numerous violations found by federal inspectors, which contributed to the health risks of the Indian miners. Dr. Joseph Wagner of the National Institute for Occupational Safety and Health said conditions at the Navajo reservation " present serious medical and ethical questions about the responsibilities of the corporation and federal government" (Rosier, 2003). These occurrences are repeated events that only parallel the health effects and data outlined in chapter 1. By 1975, about 3% of the total national reserves were from Native natural resources which included "between 100 and 200 billion tons of coal and about 10% of the nation's coal reserves and perhaps most importantly a high percentage of the country has uranium reserves" (Rosier, 2003). The Black Mesa coal rip-off became a significant environmental cause and concern for indigenous rights. The issue was reported by major news companies including CBS, ABC, the Washington Post, and the New York Times. This coverage turned the issue into a symbol of exploitation of the indigenous groups. These repeated conflicts only showed native leaders that both the government and the BIA repeatedly failed to provide representation, and energy companies couldn't be trusted.

These examples include historical recurrences directly relating to the construction of various oil pipelines through indigenous lands. Two significant examples are the conflicts of the Keystone XL Pipeline, one very similar to the case of the Line 3 Pipeline, and the conflict at Standing Rock with the Dakota Access Pipeline. As discussed in Chapter 1, the very recent conflict regarding the Keystone XL Pipeline had a planned path crossing through treaty territory. There was a long political and environmental battle that went on for more than 10 years, and only recently became a victory. The Keystone XL pipeline was an expansion of an original Keystone pipeline, proposed by the TransCanada Energy company, or TC Energy. This expansion was initially designed in 2008 by the company to transport an increased amount of 168 billion barrels of tar sands oil, estimated to be a total amount of 830,000 barrels per day. It traveled from Alberta, Canada to various parts of the United States reaching all the way down to Texas. The Keystone XL pipeline consisted of two parts; a completed southern leg which ran from Oklahoma to Texas, and a northern leg from Alberta to Nebraska, running through Montana and South Dakota. While the southern leg had already been approved, the northern leg of the pipeline expansion was greatly debated and protested against. This was driven by the substantial negative effects that tar sands oil pipelines have, as indicated in Chapter 1 and other justice, philosophical historical issues that are addressed and covered throughout this thesis. The Keystone pipeline system, like any other tar sands oil pipeline, is significantly prone to leaking. More than once the Keystone pipeline had substantial leaks and spills occurring in North Dakota. One occasion in October of 2019, more than 383,000 gallons of tar sands oil from the pipeline spilled causing a temporary shutdown of the pipeline. The toxic characteristics of tar sands oil, which the Keystone XL pipeline carried, posed a direct threat towards the indigenous communities as well as the natural forest; a conflict that the Line 3 closely mimics.

Looking specifically at the natural environment, the Keystone XL holds the same environmental threats to Canada's boreal forest as any oil pipeline. The boreal forest of Alberta, Canada is estimated to hold more than 300 billion tons of carbon. The forest leveling and wetland degradation that is required for the construction of the expanded pipeline would only contribute to the climate issues outlined in Chapter 1. The construction of the pipeline expansion put at risk, specifically the Athabasca River; a water source significant not only to the vast wildlife of the area, but to the local indigenous communities as a prominent resource of fish. According to a NRDC report, the Keystone XL pipeline would have endangered "the Athabasca's supply, forcing local communities to dramatically alter their livelihoods and everyday activities like hunting and fishing" (NRDC 2021).

As noted in Chapter 1, native communities feared the numerous negative effects that oil pipelines instill on the surrounding people and environment. Given the massive impact of the 2010 Deepwater Horizon oil spill in the Gulf of Mexico, as well as the 2011 Enbridge pipeline spill, during which an estimated 877,000 U.S. gallons of oil sands flowed into the Kalamazoo River near Michigan, there was valid concern surrounding about the possibility of an oil spill near fresh water sources such as the Ogallala Aquifer in Nebraska's Sand Hills region (Sherval, 2015). Examined more closely in chapter 3, the implications of the effects of a pipeline like the Keystone XL pipeline are only furthered when the U.S. Department of State Final Environmental Impact Statement (FEIS), indicated that "pipeline spills are inevitable, particularly smaller ones", all despite monitoring and prevention systems put in place (Sherval, 2015).

The great controversy over the pipeline expansion for Keystone caused a vast amount of political battle and activism for a number of years, spanning three presidencies. There was a substantial amount of opposition and protest against the proposed pipeline expansion from

various groups of activists and organizations. In 2014 "more than two million comments urging a rejection of the pipeline were submitted to the U.S. Department of State during a 30-day public comment period"(NRDC 2021). The issue was thought to have ended in 2015 when the Obama administration vetoed the cross-border permit with recognition of the substantial threats it posed to the ecosystem, climate, and people. The project was only revitalized by the Trump administration in 2017 after approving the permit after four days in office. It wasn't until the Biden administration revoked the permit that the pipeline and expansion proposal was officially and permanently stopped. The indigenous communities sued for the environmental and health effects that the pipeline expansion would have had, similar to the effects of Line 3, but was only rejected and ignored.

Representing another well-known pipeline case as an example of injustice is the Dakota Access Pipeline. In 2016, over 15,000 people from both native tribes and activists all across the nation, came together to stand against the construction of the Dakota access pipeline. This pipeline threatened the sacred and ancient burial grounds of the Standing Rock Sioux Tribe, and their water, just as the Keystone XL pipeline did and as Line 3 is. This violated the Fort Laramie Treaty which gave them the "undisturbed use and occupation" of the land. "Once again, white supremacy overruled the concerns of Native peoples", and the government and corporation responded to the protests by beating the protesters, and releasing attack dogs on them (Prine 2019). National attention was brought to the Standing Rock conflict and the injustice was seen. Although the discrepancy in rights and justice became visible in Standing Rock, and is being fought with the new Line 3 proposal, issues like these are ones that are recurring and rooted in our nation's history.

United States officials and politicians are using using the arguments that depending on the Canadian oil resources, which is where majority of these pipelines are starting from, would help 'limit OPEC's influence, reduce America's susceptibility to Middle East supply disruptions, and insulate against terrorist activities by utilising secure infrastructure'' (Sherval, 2015). These sorts of reasoning indicate that security is still one of the key arguments used to justify the extraction and transportation of oil sands to regional and global markets. By portraying this, as well as the development of oil sands, as being in the 'national interest,' the government is working to minimize and dismiss any criticism of its activities as "unpatriotic, radical, or subversive," and an attempt to hinder economic progress (Sherval, 2015).

Within the media, these very significant historical events are not acknowledged or shared and through that there is very minimal work of reparations or reconciliation between the U.S. government and native groups. As examined further in chapter 5, there needs to be a presence of more groups like the National Native American Boarding School Healing Coalition which work to help those who have been deeply hurt and affected by this traumatizing period of time. Addressing the significant lack of acknowledgement, and bringing the situation to light is crucial because of the prominent effects it has for the people. With respect to the issue of a country which has historically made and enforced policies to take Indigenous children from their families, in some way needs to recognize the issue and apologies for it. All other countries except the United States have worked to make some kind of reconciliation or reparations.

Chapter 3. Indigenous Philosophies on Environmental Justice (word count: 2751)

In the 1960s, Enbridge Energy, a Canadian natural gas distribution company, constructed an oil pipeline known as Line 3 from Alberta, Canada to Superior, Wisconsin. This pipeline was

made to transport 760,000 barrels of tar sands oil a day to the United States. After nearly 60 years of use, the pipeline was seen to require substantial maintenance and Enbridge deemed the pipeline to be too old for use. In 2015 Enbridge proposed a plan for a new pipeline, leaving the old one, and so started the years of legal and political back and forth for Line 3. In 2016, All eyes were on Minnesota when Canada, North Dakota, and Wisconsin all had approved their segments of the new pipeline. The Minnesota Public Commission (PUC), a board whose five Governor-appointed members are tasked with regulating things like electricity or natural gas, voted on a number of permits for Line 3. The three main permits are the Environmental Impact Statement (EIS), which addresses the Environmental risks of the pipeline, the Certificate of Need proving a valid need of the pipeline, and the Route Permit which confirms the path of the pipeline. Initially, in June of 2018 the PUC had unanimously voted to approve both the Certificate of Need and the Route Permit. However, in June of 2019 the PUC deemed the EIS invalid because it neglected the risks of an oil spill to the watershed of Lake Superior. After years of meetings and revisions, the PUC approved the revised EIS in February of 2020. Although this might have seemed like the final approval Enbridge needed to start construction, Gov. Walz's administration continues the back and forth struggle today as they file appeals against the approval decision and the regulatory process, despite the approval from his regulators.

As the political battle of Line 3 continues today, the Native people and environmental advocates take their stance in the fight against it as well. The new Line 3 pipeline threatens environmental justice in the Native communities in Minnesota as well. Initially in planning out the proposal of the new pipeline, Enbridge decided to change the route of Line 3. This is due to the direct resistance of the original Line 3 by the Leech Lake band who "made it clear to Enbridge several years ago that it would not host a new pipeline, according to PUC filings" since the path of the

original pipeline goes directly through Leech Lake reservation (Hughlett 2017). While Enbridge worked to avoid the reservation by planning a different path for the new pipeline, he chose one that would go south then cross the Mississippi River toward the shores of Lake Superior, still going directly through treaty territory.

The new path of the Line 3 pipeline, although avoiding the reservations, would cross untouched wetlands and wild rice fields. These are components that are seen as vital to the Anishnaabe people and a significant piece of their culture. In a report of the environmental effects of Line 3 by the Commerce Department, it quoted the Anishinaabe tribal elder stating, "Tribal members believe manoomin [rice] is priceless; it nourishes the soul, community and bodies of the Anishinaabe" and included their concern for "accidental spills" (Hughlett 2017). The rice fields are a place that are considered home to these people. By constructing an oil pipeline through these wetlands and rice, they are subject to the damaging effects of the oil. Enbridge, and the original Line 3 pipeline specifically, have already had multiple disastrous oil spills in the past creating no doubt that there is a chance of one happening with the new pipeline. At one point, the old line 3 had even exploded which not only caused a fire but killed two workers. It is not viable to claim that the environment surrounding the new pipeline would not be subject to any possible effects or consequences.

Our philosophies and ideologies today are greatly grounded in a western societal perspective. In relation to our natural environment, there is a strong idea that we as people are not a fundamental component of nature. We don't see ourselves as a legitimate part of nature. We have put ourselves so high above it that we forget what our role as humans is in this world; a very contrasting view from many native philosophies with respect to land. This has now led to only being able to see our actions as incompatible with that of the natural environment.

A large issue of this pipeline is that it greatly goes against the ideology of respecting and caring for the environment as it gives to us. In reflection to this event Kimmerer writes of how our gift to nature as humans is to love and take care of it in return in her book, *Braiding Sweetgrass*. Kimmerer reminds us through Native American philosophies of nature that we are still both an equal and important component of nature. She reflects on how our original relationship with nature is one based on giving and taking. We are responsible for caring for the environment just as it naturally cares for us. It is based on reciprocity. In looking at this perspective compared to that of the western perspective, the understanding of value and worth is greatly contrasted. In his text, *Native Pragmatism*, Scott Pratt shares the ideas of how differently the meaning of something can be perceived. He explains that "conceptions go beyond reports of conceivable effects to include what constitutes preferred effects. By considering a thing in terms of its "cash value," James thinks one gets a measure of relative worth. Things with greater "cash value," that is, things that have more valuable effects, become things preferred in choosing actions and seeking possibilities. These preferred effects then become normative aspects of our conceptions of things and events. To accept this view of knowledge, however, appears to accept a kind of sophistry where human interests become the measure of what constitutes knowledge" (Pratt, 20). The perspectives of these two examples are, on the surface, greatly different ideas. One valuing the essence and moments of our gift and the other prominent in the thoughts of perceived worth. By being able to bring more awareness and understanding to a perspective that values not monetary but the time and appreciation for our natural environment and its gift, as Kimmerer expresses, would cause a connection to the environment that would shape our decisions around it.

This perspective and philosophy can be exemplified through the idigenous responses and actions when looking at an example which parallels those noted in chapter 2. In late 1972, Consol Coal offered the Northern Cheyenne energy firms a bonus of $35 per acre, a royalty of 25 cents per ton, and a Community Health Center worth 1.5 million dollars. At this time Northern Cheyenne energy firms were offered $9 per acre, which was still less than market prices. This was an astounding offer especially for a town with 50% unemployment and numerous health issues. Consul wanted to develop a gas station facility on the reservation but demanded a response to the offer within 15 days, placing tribal leaders under tremendous pressure. A lot of Cheyenne were afraid that the company's proposal would overrun their community since it would consume vital water resources and required housing for approximately thirty thousand workers, ten times the number of Cheyenne. The group decided to turn down the offer that would bring over $500,000 per household. One Cheyenne, speaking for the many, stated that he would rather live poor with his land and own people, and safeguard the Cheyenne way of life than live wealthy on tainted land, surrounded by strangers (Rosier, 2003).

A prominent and famous figure in the shaping of various philosophical understandings in native tribes was Oglala Lakota holy man Black Elk. Black Elk, who lived from 1863 to 1950, had a long-lasting influence on knowledge of 19th-century Plains Indian cultures and faiths. Black Elk was involved in some of the most significant historical events in the American West and is still remembered today for his sacred visions and teachings. Black Elk experienced one of his most renowned visions as a child. In this vision he was shown the world as a circle divided by two roads: the red road of life, which ran north to south, and the black road of death, which ran west to east. A holy tree sprouted in the center where the roads crossed, signifying the peace of all living things. Black Elk saw the holy tree was dead and his vision was meant to give him

the ability to bring it back to life. The vision showed him and his people following the red path through four generations, at the conclusion of which the tree flowered again and animals and humans coexisted peacefully (Demallie, 2009). Scholars have debated about the link between Black Elk's spirituality and Christianity in following years, but regardless his teachings have become the greatest articulation of a North American Indian environmental ethic from any perspective. The central idea surrounding Black Elk's vision is oneness and a whole relationship. Represented by the circle in the vision, the world is shown as one. Every type of being within the circle is connected to one another and is holy. All are related and linked by at least the commonality of a great spirit. This Native American ecological worldview continues to connect to new generations concerned with the survival of the planet (Demallie, 2009).

On the contrary, there is a common idea today that humans are a component of nature rather than where it is often understood today that we are only capable of creating a negative impact on our environment. Kimmerer exemplifies how greatly this perspective is emphasized in classes and everyday perspectives. She explains that when giving her ecology students a survey about their understanding of the negative impacts of humans and nature, every student was able to extensively explain all of the negative effects. When asked about what they understand about the positive relationship between nature and humans, they had no answer. This is a clear example of how this ideology is rooted in our way of life and things like our methods for teaching about nature. The belief is held that we are solely able and responsible for creating only negative forces on nature and nothing more. Today many economic decisions and political stances are made from monetary benefits rather than the thoughts of our current position in our relationship with nature. A great influence of the activism against Line 3 is based in the understanding of the relationship between humans and nature in a reciprocal, equal manner.

The perspective we hold towards nature greatly impacts our response and actions towards it. In an environmental crisis, it is vital that we incorporate and work with Native American philosophies to implement the understanding that can create a more wholesome change, while maintaining a happy and sustainable lifestyle. Initially realizing that we do have a gift and a part in the natural world allows for the first step of reconnecting. As people we are called to care for our natural environment and respect it rather than solely taking from it. Due to current scientific and technological developments, our generation today is more likely to face a larger moral responsibility for its descendants than any other generation. The fact that science has supplied us with unparalleled knowledge about the implications of our actions and policies, we are, on the flipside, also able to plan to prevent these effects. Two important requirements of moral responsibility are knowledge of consequences and the ability to influence future outcomes (Partridge, 2009). Coinciding with environmental justice action with environmental ethics and philosophy, the argument of "the rights of future persons" additionally comes into play. This involves the questions such as whether future generations have the right to clean air, energy resources, and a stable climate, in addition to how these rights imply claims toward the current generation. Many philosophers have argued that future generations do not have rights, "not because future persons are not entitled to these benefits, but more fundamentally, because the concept of rights cannot meaningfully be attributed to future persons. Only actual persons can be said to have rights"(Partridge, 2009). Future humans will have rights only when they come into being. It is argued though that these people may, nevertheless, have passive rights to be benefited, or at the very least not to be harmed.

Looking past the monetary value and seeing the reciprocal relationship we are meant to have with the environment is the basis of a positive perspective. Creating an understanding

through the respect and time given to listening to another is one that greatly applies to our relationship with nature. By simply listening to what the environment is telling us, we are able to learn more and see past the surface exterior. In essence, there is currently a strong misunderstanding between humans and nature. We have lost where we stand and from that, don't know the right path to follow. If people take time to work with Native American philosophies, there is a way to reconnect with the relationship of humans and the natural world.

The field and work of environmental justice, both in theory and in practice, covers a wide variety of challenges by merging social justice with environmental issues. Those in this discipline often consider the environment as a complex of social and political interactions, rather than a natural being. Therefore, work in this subject typically analyzes the social, cultural, and political settings in which people interact with the natural environment (Figueroa, 2009). Concerns and concepts surrounding distributive justice are frequently emphasized in environmental justice campaigns. It considers how environmental benefits and obligations are distributed across people and what ways citizens are compensated for inequalities of environmental burden. A common example of these issues, and relating to the historical examples of oil pipelines presented in chapter 2, are industrial pollution. Looking specifically at these examples, the indigenous peoples are repeatedly subjected to an unequal amount of environmental degradation and pollution as large energy companies repeatedly propose their land for construction and use of oil pipelines. Access to clean, safe settings at home and at work, as well as access to nonindustrial milieus such as national parks and forests and regional open-space preserves, are all environmental advantages. This is deserved not just as a political and legal right, but also as a human environmental right. This was exemplified when the 2014 release of the U.S. Department of State Final Environmental Impact Statement (FEIS), which considered

the possible effects of a KXL spill, suggested that "pipeline spills are inevitable, particularly smaller ones," and estimated that "the Keystone XL pipeline will leak an average of 518 barrels of oil per year," despite the fact that TransCanada is putting monitoring systems in place (Sherval, 2015).

This ideology of looking down on the Native people is rooted in our history, as seen across chapter 2. To make any change or progress forward we are called to change this view. As further examined in chapter 4, only when traditional environmental knowledge is "scientized," it is included in environmental decision-making. Aboriginal knowledge is only acknowledged if it corresponds to Western systems and ideals. From there, it is only explored to the extent that it is beneficial in Western environmental governance. Currently, traditional land use consultation through government and corporate mechanisms falls short of supporting Treaty and Aboriginal rights and fails to appropriately examine the implications of oil sands development on Aboriginal livelihoods and ties with the land.

Relating to the data examined in chapter 1, although climate change will affect everyone, typically those who have done the least to cause it will suffer the most. This includes being hit harder by climatic variability and catastrophic occurrences. Climate change separates the affluent from the poor. Those who will suffer the most as a result of climate change will be people who live in the twenty-first century and beyond, and they will mostly be the grandchildren of those who are presently living in poverty on the fringe of the industrialized world. To avoid disastrous anthropogenic interference with the climate system, those who are wealthy by global standards must drastically reduce their emissions in order to help future generations of impoverished people. This puts into question the implication for individuals who live in connections with

landscapes that are now highly prized by settlers while yet drawing nourishment and spiritual meaning from them.

Chapter 4. Political and Legal Struggle of Land Rights (word count: 2887)

The political relevance and history within this environmental issue is a prominent part in shaping the outcome. As referenced in chapter 2, the history between the native people and the government with respect to treaty rights and policies is clearly a deep conflict. From issues like the Boarding School Era and the Indian Removal Act, to more direct political components of this issue like specific treaty territory or permits of the pipeline, there is consistently a large discrepancy between the given human rights and government action. Based on the information from chapter 1 and chapter 2, this chapter will expand on the details and implications of various policies made involving the construction of Line 3 with regard to numerous surrounding aspects, like historical and philosophical context. With politics and legal work being a prominent driving force in all of our national processes, it is a key component as an environmental justice issue and of a solution.

The significant issue with the path of Line 3 pipeline is its presence in the treaty territory of the Anishinaabe, especially with respect to the environmental and health consequences an oil pipeline has as discussed in chapter 1 and chapter 3. While Enbridge worked to avoid the reservation by planning a different path for the new pipeline, he chose one that would go south then cross the Mississippi River toward the shores of Lake Superior, still going directly through treaty territory. This ultimately violates the treaty rights that the Anishinaabe people hold over that land. And, as examined in chapter 3, this greatly affects the philosophical values of the

native peoples and having zero respect of acknowledgement from corporate and governmental America as exemplified through events of American history.

There have been many treaties made between the U.S. Government and the Anishinaabe people regarding the land in northern Minnesota that they have rights to. In the Treaty of 1855, the Anishinaabe people ceded a large portion of their land to the government. It was understood that, although the treaty didn't recognize it as their owning of the land, they were still allowed to use that land for things like hunting and fishing. This was affirmed by the Treaty of 1837 which says, "The privilege of hunting, fishing, and gathering, the wild rice, upon the lands, the rivers and the lakes included in the territory ceded, is guaranteed to the Indians", as stated in the Minnesota V. Mille Lacs Band case in 1999. Through a number of treaties, these rights were granted and enforced for the Anishinaabe people. The new path of the oil pipeline jeopardizes the land the people have rights to and, very importantly, the wild rice fields. In needing to clarify the rights which are clearly stated in a treaty shows the lack of respect and fosters further trust issues. It is clear that these people are being subjected to unequal treatment by the government, fostering issues of environmental injustice. It is clear that the numerous permits which are debated by the Minnesota Public Commission (PUC), and required for the continued construction of the Line 3 pipeline are in conflict with these treaty and policy rights that the Anishinaabe people hold. As discussed in chapter 1, the three most prominent permits towards this environmental justice fight, which are needed for the pipeline to be approved in Minnesota, are the Environmental Impact Statement, the Certificate of Need, and the Route Permit. The Route Permit would allow the path of the pipeline to go through 330 miles of northern Minnesota which would additionally require water crossing permits. Water crossing permits are also known as 401 Certification, and allow for the pipeline to cross over various bodies of water. This would

specifically allow crossing over 192 bodies of water subjecting them to the environmental effects

a pipeline has, including the Mississippi River twice over.

We must recognize that the regional native communities, their members, and those that

represent them, whether it be leaders or political representatives, have repeatedly voiced their

serious worry about the extreme and large-scale extraction that is taking place in northern

Alberta. In addition to this, the political and participatory procedures that go with these situations

need to be addressed. Some contend that social scientists hold some of the responsibilities due to

the fact that there is both minimal social sciences which have displayed the specific impacts that

oil sands have put on the indigenous peoples, and what has been conducted has greatly failed to

capture the true experiences of the indigenous peoples (Baker, Westman, 2018). In reflection of

this, direct opinions of the people involved serve as clear examples that these perspectives should

be prioritized and heard throughout this process.

> I keep complaining but nobody is doing nothing, People are hiding
> everything that is going on here. The environment minister is helping oil
> companies and he doesn't give a shit about Indians in Fort McKay
> −A trapper quoted in an Environmental Impact Assessment − Joslyn North
> Mine Project "Traditional Ecological Knowledge and Land Use Report.

> A room is the wrong place to tell information.
> −An Elder at a public consultation meeting, quoted in an Environment
> Impact Assessment − Kearl Lake Project.

> The cumulative effect of this disappointment (with consultations and
> impact assessment) is a psychological and spiritual fatigue, occurring around the
> older, more traditional members of the community. They are tired of expressing
> the same concerns and telling the same stories, which seem to have no effect on
> the course of development.
> −From the remarks of the authors of the Environment Impact Assessment
> – Kearl Lake Project. (Baker, Westman, 2018)

When directly included in looking at the effects of oil pipelines, it is astonishingly clear that both

those who use the land, which is usually the target audience of impact assessments, and the

participatory consultations agree that the system has serious flaws. It does not include the great opposition of those who will inevitably be most impacted by the project that these large energy companies propose. Additionally, this broken system is repeatedly dragging these groups into participating in taxing and ineffective bureaucratic processes (Baker, Westman, 2018).

With a very few exceptions, the Indigenous peoples' insights have gone unaccounted for, despite the fact that they have long voiced issues about the localized effects of oil sands production and development on their well-being and health. Without critical social science research on this topic, we are left with the political generalizations that ignore the experiences and understandings of the Indigenous peoples' around oil sands development ((Baker, Westman, 2018)). The research in northern Canada and the impact assessment have largely mirrored settler society's mainstream views on culture change. Culture change typically refers to the impact of cultural capital on individual and group behavior, specifically within public policy. This topic is very prevalent within the oil sands consultancy and Energy Impact Assessments (EIAs). This reflects the discounting of traditional land use and environmental knowledge, in addition to promoting a certain system of land use and landscape in the future.

As explained in chapter 3, Traditional land use studies and Environmental Impact Assessments (EIAs) take knowledge from the local and indigenous communities without protecting the land, people, or their treaty rights as they are supposed to. When looking at research and various social science studies that have taken place to examine the effects of the development and production of oil sands infrastructure, they have repeatedly neglected to include the actual experiences or perspective of the Indigenous people. This poses a significant issue because, as consistently seen, these are the people who are most impacted by these productions in a number of ways. This lack of acknowledgement includes the traditional

environmental knowledge. Currently, the studies of land use and the Environmental Impact Assessments (EIAs) that are produced are highly extractive of the communities that are involved. In a simplistic description, these studies take the knowledge from these communities without giving back in any way. They consistently fail to incorporate the true relationship these people have with the natural landscape and violate a number of treaty rights. As an example and relating to the philosophical values examined in chapter 3, this means of taking without giving back violates the systems of respect and reciprocity systems that groups like the Cree, Dene and Métis hold. This represents a negative form of reciprocity demonstrating that " traditional land use studies and EIAs in the oil sands region are not acting to protect Treaty rights to land and livelihood, as they are required to do by law" (Baker, Westman, 2018). Once taken from the indigenous peoples, the traditional land knowledge is put through a process which is refined and distilled in order to meet certain corporate consultation requirements. This process of traditional land use consultation that is conducted by large energy corporations and government processes, are not in support of treaty and aboriginal rights which they are entitled to in addition to failing short of properly assessing the impacts that the development of oil sands will have. The latter alone is a significant issue due to the fact that it will indirectly exclude the impacts on the lifestyles and relationships with the land that these people have. In part, this can be attributed to the inclusion of traditional land use studies being within the EIA process, which is centered on hasty assessments and 'science-for-hire'. Companies take on consultants who are not highly qualified social scientists or ethnographic research methodology specialists to consult traditional land use and produce studies. As a consequence, superficial reports are created that ignore the highly intricate and valuable relationship that Indigenous peoples have with their environments.

This system only furthers a colonial perspective that takes on the belief that "development and progress are considered to be beneficial" while indigenous traditions are limited to points.

As stated above, those who are employed to consult land use studies are typically not well-trained social scientists or experts in ethnographic research methods. This results in refined reports that ignore relationships that Indigenous peoples have with environments. The current traditional land use consultations and EIA studies only reflect a continued mainstream colonial perspective in which the economic growth is viewed as positive, while Indigenous practices "can be refined to points on maps that can be avoided or mitigated with few long-term impacts" (Baker, Westman, 2018). This is continued in various forms as shown across the disciplines highlighted in this paper. The numerous examples like this one, especially when looking at the Boarding School Era, exemplify the question and reasoning of why the federal government would take away the power tribal governments have to give care for their people while simultaneously constructing institutions that were far more destructive to Native American individuals? David Wallace Adams in Education for Extinction: American Indians and the Boarding School Experience, argues that through the boarding schools, "reformers, educators, and federal agents waged cultural, psychological, and intellectual warfare on Native students as part of a concerted effort to turn Indians into "Americans" through stories of experiences in boarding schools (Davis, 2001). These studies, which include direct experiences of Indian boarding schools and resistance, reveal the gap between the aims to assimilate the people through federal policy and its actual effects. In reality, rather than eliminating traditional cultures, although seriously damaged, it could be argued that in a sense the boarding school experiences created cultural survival in a variety of resilient and unanticipated ways. Adams contends that the connections formed by students across tribes contributed to a pan-Indian

identity that pushed Native Americans to collaborate for political and cultural self-determination

in the twentieth century (Davis, 2001). In looking at institutions like the Albuquerque Indian

School and Santa Fe Indian School, these are examples of "interactions between Pueblo

communities, school personnel, and government officials as well as the real consequences of the

institutions and debates on the enrolled students"(Green, 2017). While these schools have similar

occurrences to those of other boarding schools, these schools were located on the edge of the

reach of the federal government, and therefore present a unique example of how these Native

groups were able to "modify and redirect the assimilative force of two federal board schools built

in their own backyard" (Green, 2017). Compared to other institutions, these groups had agency

over the school where the totality of power was neither in the hands of federal officials nor

school administrators. The borderland aspect of the area opened up new opportunities and

possibilities for Pueblo autonomy and acceptability.

> Gram argues: "The United States might have hoped that incorporation and assimilation would destroy the world of Pueblos, but in reality the Pueblos preserved that world in part by incorporating Western education and the economic resources that the schools represented into preexisting Pueblo patterns of subsistence and methods of interacting with outsiders. From their inception, school administrators and federal officials needed local support in order to sustain financial solvency for continuing operations and to advance assimilation plans. The schools could not operate without desperately-needed student tuition dollars and local support. Unlike it was at the Carlisle Indian School, school administrators' power was not absolute. Moreover, the schools fiercely competed with an entrenched Catholic school system and other state boarding schools for Native American students, tuition dollars, and additional federal allocations. This economic and educational reality gave both parents and students leverage in negotiating summer vacations, lax enforcement of assimilation policies, and other concessions. Hence, Pueblo community leaders, parents, and students had and wielded power that was typically not possible in Native American boarding schools. In turn, the Pueblo community embraced both schools for the value and utility afforded (Green, 2017).

The policies put in place for boarding schools expose the tricky and shockingly disparate

social policies that were implemented in indigenous communities throughout the nineteenth

century. Additionally, they lay the groundwork for rethinking social welfare and the role of these people today compared to that time.

The Cherokee Nation endured significant cultural transitions throughout the nineteenth century, from the Cherokee Removal to the Civil War. This is all in addition to internal splits along class, racial, and cultural orientations, all of which was caused in response to the various colonial policies that were instilled. This forced leaders and citizens to devise alternative ways to fulfill internal demands and difficulties while consistently fighting to maintain their national sovereignty. As a result, the Cherokee National Government became increasingly centralized and pursued broad social programs. These programs were aimed to provide care for its individuals and coincide with more traditional Cherokee beliefs and support networks. By 1907, the Cherokee national government was able to fund and manage several institutions, "including an orphanage, a prison, and an asylum for the disabled, in addition to an extensive public education system" (Steineker, 2017). These institutions were formed from tedious and extensive collective action. They arose as a result of a continual and difficult process of both political and cultural development . The Cherokee government embraced and entirely reformed social welfare throughout several decades. By that time, being a part of the Cherokee Nation evolved from a system of only kinship to collective political membership. This provides an essential interpretive perspective that other scholars should more frequently follow. It is clear that the attention should be turned away from policies which are imposed by federal and state governments on Native peoples. This example of the work done by the Cherokee national government shows that policies developed by tribal nations for their own peoples are significantly more affected and in line with the goals of the people. Despite the competence of Cherokee institutions, federal assimilation programs and the flow of immigrants into the area put persistent pressure on tribal

administrations. Following a series of incremental measures to open Native land holdings in Indian Territory and separate them for colonization, Congress approved the 1898 Curtis Act, which proved to be the final challenge to the Cherokee Nation. The deliberate practices during this time, in an attempt to assimilate these people, took away the Native government institutions, especially those that provided for the wellbeing of Cherokee people. It contends that the nation's basic ideals endured, even as the US demolished its governmental infrastructure.

In the end, the Cherokees' nation-building initiative did not result in absorption in the American nation-state, as federal planners and administrators would have intended (Steineker, 2017). With the 1841 Public Education Act, the Cherokee Nation created the structure for its education system over four decades before Richard Henry Pratt developed the blueprint for federal Indian boarding schools with Carlisle Indian Industrial School. Similarly, Canton Asylum for Insane Indians opened its doors twenty-seven years after the Cherokee Nation began offering mental health treatment to its members. The issue then arises, why did the federal government take away some tribal governments' power to give care for their inhabitants while simultaneously constructing institutions that were far more destructive than beneficial to vulnerable Native American individuals? Repeatedly, greed and private ownership in America has generated serious wealth inequities across the country. This has left a large number of the people struggling and with almost no government assistance. Cherokees promoted their model as a more generally beneficial system and utilized it to protect their national sovereignty. The Cherokee social services are a compelling case that greatly surpasses that of the rest of the country and led the other Five Tribes to form similar systems for their citizens (Steineker, 2017).

Chapter 5. Political Changes: Policies to Solutions (word count: 4975)

This issue of the new Line 3 is only a symptom of the deeper problems this nation holds. If we are willing to respectfully understand the perspectives of those fighting for their land and their water, there would not be an issue calling for environmental justice. This issue calls for procedural justice between the Native Americans and the government. If the lawful rights that they formed with the United States government were equally and in a trustworthy manner upheld, there would be limited issues of the environmental injustice the Native people face due to the pipeline. The decisions made in courts are biased against these people and are favoring the economic stance of affiliated companies.

While a global economy assessment can be a beneficial resource for the means of policy and decision making; an assessment regarding wetlands can be unreliable. Overall, water resources and wetland ecosystems are globally affected in a number of ways. Due to this, a global assessment is not always a beneficial resource for policy making because any particular ecosystem will have different characteristics and needs than others. Looking at a global to local scale, these assessments might not always meet the needs that policy makers at various levels will have because of the different issues and situations of each ecosystem. Given the negative implications an oil pipeline has not only for the land but the Native people, it is a localized issue. The use of an ecological assessment would still be a futile resource for beneficial policy-making. This type of information would be insufficient because there is a large amount of overlap of natural processes in global and local regions and energy transfer across numerous regions. Applying this specifically in this case study, despite the prominent environmental issue of wetland degradation and health impacts to the Native people of the land, there is additionally a

significant component of the general impacts and implications an oil pipeline like this one has across various states.

A huge aspect that will have to take part in the policy decisions regarding wetland resources are the trade-offs between resources and future uses. As examined in Chapter 1, there are many ecosystem services that wetlands provide. As laid out in the Millenium Ecosystem Assessment on Wetlands and Water Synthesis, not only do the wetlands like those examined in the specific Line 3 case provide provisioning services of food in the form of rice and fresh water, but they provide regulating services for the ecosystem and supporting services like nutrient cycling or soil formation. Additionally, as exported in Chapter 3 through the philosophical and cultural values of the indigenous people, the land provides cultural services in all spiritual, recreational, aesthetic, and educational aspects. The land that the new Line 3 pipeline threatens is significant for education of the culture and tradition. Despite the fact that the benefits of maintaining the wetland ecosystems greatly outweigh the costs, there are still many who accept the reasoning for degrading the land. This requires strong political and legal solutions that are in alignment with the voices of the local and Native individuals. According to the Millenium Ecosystem Assessment on Wetlands and Water Synthesis, "decisions concerning the fate of wetlands, however, are often made through processes that are unsympathetic to local needs or that lack transparency and accountability" (Millenium Ecosystem Assessment 2005). A crucial and primary issue to formulating an effective solution in any regard to this environmental issue is the lack of awareness by policy-makers of the services the wetland ecosystem provides for the people and the current condition of the ecosystem. As an example, a large issue that is currently faced in regards to the ecosystem services of wetlands is the outlook of benefits of a wetland conversion. The overall economic worth of untouched wetlands is consistently higher than the

opposite when considering both the marketed and non-marketed economic advantages of the ecosystem. Currently, the benefits that are seen with converting wetlands rather than maintaining them is only regarded as greater which is encouraged by subsidies for things like infrastructure including industrial or the draining of wetlands; all of which is parallel to the process of the construction of oil pipelines. Having decision-makers that are aware of the economic values estimated for the ecosystem services of wetlands, could greatly shape the outcome of political solutions.

In looking at various scenarios of development and management systems regarding wetland ecosystems, it can be shown that there is significance in not only taking action but taking the correct method of action. As described by the Millenium Ecosystem Assessment,

> The MA developed four scenarios to explore plausible futures for ecosystems and human well-being. The scenarios explored two Global development paths — one in which the world becomes increasingly globalized and the other in which it becomes increasingly regionalized — as well as two different approaches to ecosystem management — one in which actions are reactive and most problems are addressed only after they become obvious and the other in which ecosystem management is proactive and policies deliberately seek to maintain ecosystem services for the long term. (Millenium Ecosystem Assessment 2005)

It is clearly shown in the ecological report and assessment, systems that take a reactive approach, despite being globalized or regionalized, have an expected continued increase in degradation. However, under proactive systems there was an estimated decrease in ecosystem degradation to a constant, unchanged level by 2050. This indicates a solution that takes proactive measures which require the informed understanding of wetland ecosystem characteristics and awareness of the relationship between services and people. This greatly aligns with the specific indication there is a necessity for policy makers to become more knowledgeable and informed of both the economic benefits of wetlands, and the relationship the local people have with it. It is inevitable that a required component of future policy solutions is going to have to include and address the trade

offs between the current and future uses of the wetland ecosystems. With the provisioning services typically given higher priority compared to the other three ecosystem services, there needs to be a conceptual shift in the perspective of policy makers.

   Technology & Infrastructure. The increasing gap between the complex, systems-based character of both regional and global environmental disturbances, and the consistent failure of regulatory measures to appropriately address these issues, calls for new approaches. Various factors like increasing regulatory costs have pushed industries to look at new ways through a field of industrial ecology to address and manage these issues. Unlike traditional methods, these practices focus on product design and lifecycle in order to decrease environmental impacts throughout technological systems based on natural processes of the environment (Allenby, 2009). In this regard, industrial ecology is different from other related fields of study, like "natural capitalism" and "sustainability," in that it is more focused more on understanding the physical, and economic processes rather than focusing on normative postures and activism environmental perturbations (Allenby, 2009). It is also a field more problem-focused rather than generally philosophic, in keeping with its technical background. However, as a relatively new subject with ongoing change in focus and perspective, it presents an interpretive subject. An issue to consider is whether industrial ecology should be viewed as an analogy, an obligation, or an interpretive recommendation. While most designers agree that biological systems, with their intricate fluxes and transformations of energy and materials, are an intriguing means of learning and prospective model, others go beyond this and regard biology as an obligated means of design rather than a metaphor. The question of whether this representation of ecology, which places the world as a mechanism, can stay true in an age of "synthetic biology and technological convergence", remains as a subject of debate (Allenby, 2009).

A three policy reform ideas are presented in light of the "lock-in" implications of major energy infrastructure projects such as oil pipelines, all of which are relevant to legal analysis. Initially, the proposal to ban all new oil sands projects until a suitable policy procedure is developed is a crucial component to the system. "All new oil-sands projects should move forward unless developments are consistent with national and international commitments to reducing carbon pollution" (MacLean, 2015). In addition, the implementation of "legislated limits on carbon pollution (such as a carbon tax or cap-and-trade) based on current climate research," would contribute to ensuring that the full societal costs that carbon emissions from infrastructure like oil pipelines have are entirely accounted for. This additionally would play into the planning of things like investment decisions. Lastly it is crucial and imperative to make any change that policymakers adopt a more transparent and thorough decision-making process between conflicting goals such as "energy and economic development, environmental preservation, human health, and social justice" (MacLean, 2015). All of this is a comprehensive way and indication of the fact that oil pipeline projects ideas and large energy corporations methods must be evaluated and controlled in a sustainable manner. This, however, has been proven to be a difficult task as demonstrated throughout this thesis with considerable political and legal barriers standing in the way of sensible reforms.

Government. There are clear governmental and political issues in relation to the rights that indigenous people have and respect to the environment. As seen in chapter 4, there and numerous treaties granting and reaffirming the rights specifically of the Anishinaabe people to the northern land in Minnesota. Looking specifically at the Treaty of 1837, the use of the land as culturally practiced throughout the history of the Anishinaabe people is affirmed. In light of the various permits and plans of the proposed Line 3 pipeline as discussed in chapter 1 and 4, these

rights are directly jeopardized. Having an oil pipeline that directly crosses these lands only emphasizes the lack of respect for the political and legal rights of the Anishinaabe people. Additionally, this perspective can be coupled with the statistical and environmental effects as seen in chapter 1. It is clearly proved through data that the effects of a predicted oil spill is detrimental to both the surrounding communities and environment. An oil spill by Line 3 is predicted to cost up to $1.4 billion dollars and can spill thousands of gallons of unsustainable oil into the environment. While there are certain permits in the proposal process, like the Environmental Impact, Certificate of Need, and the Route Permit as seen in the previous chapters, the direct actions of government officials and administration to deny the appeals in relation to the treaty rights proves the lack of consideration to this conflict, not only as an environmental issue but as an environmental justice conflict to the indigenous people.

Considering the numerous amounts of legal and political work that is given to indigenous people with regard to land, this is not an issue of policies but rather the fundamental perspective of the government to uphold the treaties and the rights of the people in the own governments rules of law. The discipline of public policy is understood as the governmental action or lack there of regarding social and public issues. Within this includes the subset field known as environmental policy. This includes the politics and priorities of scientific decision making relating to the environment. However, this subject is not limited to political positions but includes environmental advocacy groups, the work of policy analysis organizations, and institutions representing business, although these institutions are typically opposed to environmental regulation (Minteer, 2009). The majority of environmental activism and policy across the globe aims to safeguard human interests, including health, welfare, rights, and cultural and historical values related to the natural environment.

The inclusion of environmental philosophy additionally plays in the process of environmental policy. Typically, environmental philosophers seek to influence policy within the three main stages. This includes the point of setting an agenda. This involves identifying environmental issues. Evaluation, which involves determining whether policy implementations adhere to the original intent. Lastly, policy change, which involves amending policy goals and given new information or value in political environments (Minteer, 2009). In one sense, the inclusion of ethics and politics can be interpreted as a shift in awareness which can bring about certain changes or action in conduct farthing natural transformation in society and its convention. As referenced in chapter 3 surrounding philosophical values, many philosophers have worked to include these intrinsic values of nature and perspectives which were mentioned in chapter 3, in order to create moral justification within a more robust environmental policy framework. Through these processes there is hope that it would "provide a more solid foundation for initiatives that seek to protect endangered species, wetlands, and wilderness areas" (Minteer, 2009). Within the 1990s there was a rise in the school of thought being environmental pragmatism. This worked more closely with practical policy issues inorder to make them more relevant and challenged the focus on the superiority of non anthropocentric environmental ethics. According to the new environmental pragmatists, broad anthropocentrism—an enlargement of the instrumentalist viewpoint on environmental value—is a more practical and policy-relevant approach to environmental ethics theory than nonanthropocentrism (Minteer, 2009). Conventional environmentalism aims to work with current political and economic systems, transforming them to be more environmentally friendly and encouraging policies to defend particular environmental values. Many environmental philosophers, on the other hand, want a more drastic reform of institutions, often "as an extension of their radical inquiry into the most

basic of contemporary assumptions about matters of ontology and ethics" (Kirkman, 2009). This is defined as "Deep Ecology", rejecting "shallow ecology," which only aims to modify existing institutions incrementally.

As mentioned and examined in chapter 4, during the nineteenth century, the Cherokee Nation saw tremendous changes as a result of colonial policies, the tragedy of Cherokee Removal, and the Civil War, as well as internal divides. In response, its leaders and citizens found various approaches to meeting its nation's demands and overcoming its obstacles while expressing and preserving its national sovereignty. To summarize, the national government grew more centralized and undertook wide social projects. These national-level initiatives for individual care acted as a state-sponsored adaptation of more traditional Cherokee values and support networks. In addition to a large public education system, the Cherokee national government maintained and oversaw various institutions, including an orphanage, a penitentiary, and a handicapped asylum. They arose as a result of a continuing and sometimes controversial process of political and cultural transformation. Cherokee folks tested, adopted, changed, and praised social welfare throughout several decades. This provides an essential interpretive perspective that other scholars should follow. Indeed, more researchers should follow her lead and turn their attention away from policies imposed by federal and state governments on Native peoples and toward policies developed by tribal nations for their own peoples. Reed convincingly illustrates that the Cherokees' nation-building endeavor did not represent a shift toward integration in the American nation-state, as federal politicians and administrators would have anticipated. Instead, Cherokees incorporated traditional values into modern institutions as part of a long-term strategy to establish a self-sustaining, independent country, even in the face of ongoing colonial threats. The Cherokee model not only succeeded in providing welfare help to

residents, but it also proved to be a viable alternative to social services and welfare programs available in the United States at the time. Institutions, as Reed implies, upheld Cherokee sovereignty while exposing the limitations and faults of the federal government's, states', and territories' social services. As a result, the Cherokees' social welfare activities presented a counter-narrative to state and federal social policy measures aimed at people of color, immigrants, and the destitute (Steineker, 2017).

Furthermore, having this as an issue that is historically repeated in a number of ways only reaffirms the significance of requiring a solution through a different approach than forming layered rights of treaties. The greatest and most significant example of this is the Boarding School Era and lack of reparations for that time period, as seen in chapter 2. The Boarding School Era, related to the political injustice towards the Indigenous people through policies like the Indian Removal Act and loss of land rights, is a fundamentally problematic period of history. The complete lack of action towards righting the wrongs of attempting to demolish the identity of a culture is a glaring identification of the lack of government respect towards indigenous people.

Reparations. While these treaties are clearly laid out and defined in various ways. The required solution to this is rooted in disrespect and lack of care for the people. A political solution would be to hold each accountable through policies and law but this problem fundamentally stems from the individual's perspective, understanding, and background in the position of government that they hold. The action of identifying and incorporating more political and government leaders into positions of power counteracts this discrepancy.

Environmental Conflict Resolution (ECR) refers to collaborative attempts to address environmental, public land, or natural resource disputes involving diplomatic talks and

conversation among disputants. ECR often includes government agencies collaborating with representatives from a wide range of groups who may be impacted by an agency decision. Third-party neutrals (such as mediators or facilitators) collaborate with agencies and parties to foster consensus-based dispute settlement (Elliot, 2009). Environmental conflict resolution incorporates a procedure which predominantly includes four key components and members. These include, "agencies working collaboratively with interest groups, the inclusion of all affected parties (stakeholders) in structured dialogues, the presence of independent, third party neutrals (mediators or facilitators) to manage the dialogue process and ensure its impartiality, and the attempt to achieve consensus amongst all the stakeholders as a basis for making decisions (Elliot, 2009).

Looking at this specific solution in terms of environmental issues like those of indigenous peoples and oil pipeline production, this could prove to be a difficult solution due to repeated violations of treaties and rights. As examined in-depth in chapter 2, these repeated violations have created substantial and understandable trust issues of the indigenous peoples and the American government. On the other hand, putting these situations on a table in which there are outside representatives and parties could be a beneficial aspect to problem solving. It is clear that there needs to be accountability for actions if there is any hope for upholding the agreements made. In this solution, possibly having neutral members rather than leaving parties to have free control of themselves could potentially serve as that missing piece to resolution.

Instead of formulating policies based on their own professional judgment and then soliciting public feedback through public hearings, agencies collaborate with people and stakeholders from the start to build policies or programs that satisfy the interests of all partieS (Elliot, 2009). ECR arose in this tense climate of escalating strife. ECR provided a new means to

tap into the collective expertise of interested parties and experts in order to create more effective

and implementable environmental policy. Each stakeholder provides extensive knowledge and

expertise in their respective fields of interest, as well as the capacity to analyze whether policies

might benefit or harm those interests. Parties push one other to build solutions that best suit the

requirements of all parties via open debate, information sharing, and negotiation, therefore

recognizing and advancing the public interest through direct participatory democracy (Elliot,

2009). Taking into consideration the first documented usage of ECR as an example.

Environmentalists, local people, and farmers argued over measures to regulate floods along

Washington's Snoqualmie River between 1958 and 1973. The river flooded regularly, and

farmers and communities advocated a proposed dam for flood control and irrigation benefits.

Environmentalists were opposed to the project because it would stimulate construction in the

floodplain, foster expansion from neighboring Seattle, and damage one of the most pristine

scenic and recreational regions in the area. Governor Daniel Evans requested mediators to bring

the opposing interest groups into negotiation with government agencies and implementation

organizations in 1973. After seven months of talks, the parties reached an agreement on a

proposal that included a multi-purpose dam on a separate fork of the river, as well as a system of

set-back levees, land use regulations, and floodway easements. Rather than fighting over a

mutually undesirable option, the parties involved devised a fresh set of ideas that more

successfully fulfilled their shared interests (Elliot, 2009). As seen in this example, ECR provided

a means to resolve "long-standing controversies among well-matched disputants who had

demonstrated a capacity to block each other's preferred policy options" (Elliot, 2009). ECR has

been proven to be a less expensive and more efficient option than the litigation and politically

driven tactics. Especially in the context of the conflict which is examined in this paper, there is

an obvious lack of effectiveness of political and legal methods of resolution due to governmental choices and behavior. More than 75 percent of the nearly 160 notable cases of environmental mediation that occurred by 1984 found agreement, and excitement for the method and outcomes facilitated a growth in mediated ECR (Elliot, 2009). Since the 1970s, the practice of ECR has provided a number of considerable advantages while also raising some strong reservations. Effective engagement in ECR frequently necessitates significant resources (in terms of staff time, information, study, and travel) that are more easily available to companies and government agencies than to environmental activists or community organizations... At the same time, well-designed ECR procedures may improve decision-making speed and responsiveness, provide concerned people a meaningful voice, and foster power-sharing among numerous agencies and interest groups. ECR can also encourage collaborative thinking, resulting in more considered, long-lasting, and readily adopted environmental choices (Elliot, 2009). Only when the traditional environmental knowledge from indigenous groups and worked to meet the corporate and political systems is acknowledged and included in decision-making processes. Aboriginal knowledge is only granted right when it corresponds to Western systems and ideals, and it is only explored to the extent that it is beneficial in Western environmental governance and expertise.

Public Education. There are numerous ways in which this conflict is shaped through indirect or external actions. A major issue, in regard to the overall perspective of the issue, is the lack of education and knowledge of these repeated conflicts. There is limited attention brought to the premise of these problems. This relates to both direct and indirect aspects of environmental justice issues like Line 3. As noted in chapter 3, the conflict at Standing Rock was a very prominent event primarily because of the public attention it got. Having public understanding of

these issues gives power to those fighting for the land and health of the people an oil pipeline would affect.

This goes further than simply recognizing the present issue, but is a solution that can be implemented widely. As explained in chapter 3, there is a great societal understanding of the relationship between humans and the environment in that, based on our unsustainable actions, we are not compatible. Our current practices, like the implementation of a new oil pipeline, greatly conflict with the natural workings and processes of the natural environment. As students, we are taught to see the negatives of what humans have created in relation to the natural world. If we were able to work with Native American thinkers and bring more acknowledgement to Native American philosophies on all levels of society whether it be in government, education, or a single person, we would be able to better develop a more respectful and sustainable philosophy of human relationships with nature. As American public education has become increasingly linked to job preparation, jobs, and the economy, with considerably less emphasis was given to experiential learning opportunities that brought students out in nature to study it. As a result, environmental education has been pushed to the margins of the basic public-school curriculum. Many extracurricular programs, such as boy scouts and girl scouts, were left to teach students about nature (Theobald, Rochon, 2009).

This acknowledgement of the environment within the academic and educational setting began to change in the 1960s, with the publication of publications such as Rachel Carson's *Silent Spring* and Paul Ehrlich's *The Population Bomb*. Due to the increased public concern for the environment, some curricular focus was dedicated to nature's health and well-being, notably in science and social-studies classrooms. But, at a period when civil-rights campaigns, antiwar initiatives, and the rising women's movement dominated public attention, environmental

concerns were only one of many (Theobald, Rochon, 2009). Only until 1985, particularly in the aftermath of David Orr's seminal Ecological Literacy in 1992, did environmental education emerge as a recognised area in American curriculum studies. Creative instructors fostered a form of curricular activism... Following student involvement in these initiatives, Congress established the National Environmental Education Act of 1990, thus establishing an education branch of the Environmental Protection Agency. A significant portion of this work was spent on identifying and disseminating great environmental education techniques through grants (Theobald, Rochon, 2009). In line with conservative opinion, the Environmental Protection Agency's environmental-education advisory groups have promoted the message that environmental education is solely a science classroom concern, and that, as stated in a 2005 report to Congress, environmental educators must have "the ability to present multiple perspectives on environmental issues without advocating a particular viewpoint"(Theobald, Rochon, 2009). In other words, requests for environmental action must be weighed against those favoring a laissez-faire attitude.

When public school systems were established in the 1830s and later throughout the nineteenth century, their purpose was almost exactly the opposite of what we see now. School systems were established to assist individuals in carrying out their democratic obligations. When presenting the economic advantages of education, public-school proponents would include a lively discussion of education's political elements. At the turn of the century, little is said about the contribution of public education to the political responsibilities of citizens, but we hear a lot about the alleged link between good schools and a healthy economy. The success of environmental education is likely to require that schools devote sufficient attention to the development of what has been dubbed the "democratie arts". Schools that provide such training

would be subject to ethical scrutiny. Such schools would develop students' abilities to construct an argument, persuade others, gather and use evidence, listen closely, and strive toward compromise. There is perhaps no greater arena for developing these abilities than environmental education (Theobald, Rochon, 2009).

In the context of education of the boarding school, a topic relating to the contents of chapter 2, there is an astonishing minimal amount of education around this time in history. This only adds to the power that colonists and the government put to try to limit the voices and culture of the indigenous peoples. The works, in particular, show how the United States taught its national and imperial people in a way that normalized inequality, encouraged civic belonging, and successfully neutralized dissent from persons branded as others. The breadth and complexities of American public schools in creating numerous approaches to citizenship depending on racial identities, subordination, and exclusion throughout the country and its abroad empire. In this viewpoint, there is no "distinction between the national and imperial projects" (Green, 2017). He instead suggests a new historical and geographical framework for the Gilded Age and Progressive Era. Schools served as domestic colonial institutions, espousing narratives that projected American power onto both foreign and domestic geographies and populations, and creating distinct paths to citizenship that many native-born and naturalized whites hoped would strengthen the boundaries of race and nation. From textbooks and curriculum to postgraduate employment expectations, public schooling determined the racial, social, political, and economic conventions, behaviors, and duties of all individuals resident in the United States and its expanding foreign empire (Green, 2017). Textbooks and the development of civic courses, like the well-documented effort of the United Daughters of the Confederacy, played a critical part in outlining the routes to unequal citizenship. He clearly

illustrates how history, civics, and geography textbooks not only propagated myths of American exceptionalism and projected racial differences onto the world, but also highlighted the involvement of all citizens, including those legally unable to vote in elections. Classroom rituals and pageants reinforced these messages of American patriotism, devotion, and sense of belonging. As a result, textbooks and classroom activities produced and reinforced a landscape in which the United States and Europe functioned at the cost of nonwhite people (Green, 2017). Overall, Stratton convincingly establishes the significance of public schools in defining concepts such as race, country, and empire, as well as demonstrating that a multitiered education system was not limited to black schooling (or even Native American education, which was notably absent from the text). More precision in the links between the case studies, as well as addressing the practical implications on the actual education and lives of the children caught up in these wider discussions, were required (Green, 2017).

We need to include new curriculums and teachings in our education that fosters this understanding of what people can give back to nature in return for all that it gives us. This will break the cycle of a lacking relationship between humans and nature, and counter the idea that we, as humans, are nothing but harmful to our world. It is additionally crucial to include hands-on components to this education because it is impossible for students to fully know nature and never actually experience it. This would shape our understanding of our world and change the way we address our global climate issues regarding issues like this with the concern of preserving the environment.

Throughout the history of our nation, there is a long overlooked injustice toward Native people. Although we might hold the notion that we have some understanding of these injustices towards Natives from the context of basic history courses, the truth of the reality is still largely

unknown. The land, culture, and rights of the Native Americans has repeatedly been stolen from them. The construction of a tar sands oil pipeline will change nothing about that tragic repetition of injustice.

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