

CHANGING SEASONS OF RESISTANCE: IMPACTS OF SETTLER COLONIALISM  
AND CLIMATE CHANGE IN INDIGENOUS WORLDS

By

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A Thesis Presented to

The Faculty of Humboldt State University

In Partial Fulfillment of the Requirements for the Degree

Master of Arts in Sociology

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May 2020

## ABSTRACT

### CHANGING SEASONS OF RESISTANCE: IMPACTS OF SETTLER COLONIALISM AND CLIMATE CHANGE IN INDIGENOUS WORLDS

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This paper looks at the relationship between neoliberal capitalism, genocide, the biopolitics of settler colonialism and the impacts of climate change on the cultures and traditional lifeways of Indigenous communities. It also explores Indigenous modes and methods of adaptation and resilience. Climate Change is almost certainly the most urgent social problem in the history of human life on planet Earth. Many Indigenous people are more vulnerable to the effects of climate change due to marginalization and their commitment to land-based practices. Using in depth interviews with Indigenous Peoples, primarily from the Pacific Northwest, and the analysis of existing literature, this paper will attempt to find answers to the question of how capitalism, the practice of genocide, settler colonialism and displacement of Indigenous peoples are connected. It will also seek answers to how these processes have contributed to the climate crisis and bring to the forefront how Indigenous people are resisting corporate and governmental attempts to continue capitalistic projects that emit greenhouse gases and deplete natural resources.

## ACKNOWLEDGEMENTS

During the nearly two years it took to research and write this thesis, I was supported by many people. I would like to first acknowledge the love and support I received from my son Devin and his girlfriend (my second daughter) Shyanne and my daughter Leah. These three amazing teens encouraged me and put up with my preoccupation with my books and my laptop, for days on end. I am tremendously grateful for my father Richard who has always been there for me and passing on his wisdom and strength. And for my grandparents for all of their love and guidance. And for my brothers and their significant others who never doubted me through this process. I'd also like to thank my late mother, who from the beginning encouraged and nurtured my curiosity, interests, and abilities.

I would like to thank the entire Sociology Department for providing me the opportunity to read, discuss, and write about such dynamic and important topics. I can't thank them enough for sharing their amazing reading lists! I would especially like to thank my Thesis Committee Chair, Jennifer Eichstedt, my professors Renée Byrd, Mary Virnoche, James Ordner, Josh Meisel, Elizabeth Rienzi, Tony Silvaggio; Native American Studies Professor Cutcha Risling Baldy, and Geography Professor Laura Johnson. A shout out also needs to go out to the entire Native American Studies

Department and to ITEPP for creating a campus environment that is invaluable in providing support to Indigenous students at Humboldt State.

And last but not least, I would like to thank the amazing Indigenous folks that took the time to share with me their thoughts and beliefs about the impact of climate change in our communities. I could not have completed this paper without these wonderful people: Dorothy Obie-Sylvia, André Cramblit, Dixon Terbasket, Viola “Chummy” Brooks, Jerome “Jay” Wilson, Robert “Bob” Wilson, Alfred Snow, Thomas Joseph, and PennElys Droz. Thank you all so much!

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## INTRODUCTION

Environmental degradation and climate change go hand and hand. This is abundantly evident in areas where timber harvesting occurs at rates faster than new growth can replace the trees that have been cut. The ancient redwood forests of Humboldt County California where I grew up is one of those areas. The following personal account demonstrates the reason this topic is important to me.

I was about 8 years old when I stood there for what seemed like an eternity with tears streaming down my cheeks. My tennis shoes muddy from the wet red clay ground. I stared at the jagged redwood stumps and deep trenches cut into the earth from the heavy equipment tracks. Where were the majestic towering trees reaching a hundred or more feet into the sky? Where was the gurgling creek with its tall, prehistoric looking vernal ferns and skunk cabbage? What about the animals and birds? Did the logging equipment plow right over it all? I no longer recognized the redwood forest ecosystem that was my near daily escape. The magical forest near my house was a stark, barren, apocalyptic landscape. It was at this moment that I truly realized just how destructive clear-cut logging was.

My family, both Native American and white, worked in the timber industry but from that moment on, I knew that clear cut timber harvesting was not a renewable resource industry. I knew that this place that I loved would never be as it once was. At the time, I didn't know that mine would be one of the first generations to experience human caused climate change. However, I knew that I would work to protect people and the environment from the devastating impacts of resource extraction.

The purpose of this thesis is to explore the connections between neoliberal capitalism, settler colonialism and the impact of environmental degradation and climate change on members of Indigenous communities. Through this analysis, I hope to demonstrate how these structural forces have impacted Indigenous traditional lifeways and culture. I will also seek to unpack mitigation efforts that have begun and assess



whether communities have had to physically move or make drastic changes to their lives because of the impacts of climate change on their homelands.

Climate Change is almost certainly the most urgent problem in the history of human life on planet Earth. The Intergovernmental Panel on Climate Change's (IPCC) report, released in October of 2018, estimates that if world greenhouse gas emissions continue at their current rate, the atmosphere will warm by as much as 1.5 degrees Celsius by 2040. If these projections are realized, in addition to wide-spread drought and famine, there will likely be continued marine ice sheet instability resulting in sea rise, small island and low-lying coastal area disappearance, delta flooding, impacts to biodiversity and ecosystems, species loss and extinction (IPCC 2018). Although not mentioned explicitly, if the projections outlined in the IPCC report are realized, the world's already troubling problem of climate refugees will multiply exponentially.

The field of environmental sociology has long held that the effects of environmental problems disproportionately impact people of color, women of all races and ethnicities, and the very poor (Pellow and Brehm 2013). Recent environmental research shows that Indigenous people are disproportionately affected by the effects of climate change, although they contribute much less to the underlying cause of the problem, which is the burning of fossil fuels and the production of greenhouse gases (Pellow and Brehm 2013). This research seeks to bring to the forefront the impacts of climate change on Indigenous populations paying close attention to communities in the Pacific Northwest, as well as analyze possible solutions, such as holding polluting countries accountable for mitigation efforts to reduce harm to people and cultures,

including but not limited to the relocation and resettling of climate refugees. Climate change has already severely impacted and led to the displacement of millions of people around the globe. The United Nations High Commissioner for Refugees (UNHCR) estimated that 36 million people were displaced due to natural hazard related disasters in 2009 alone and that number is expected to rise dramatically in the next few decades (Bayes 2017). With the recent lack of validation of the IPCC report from the Trump administration, the United States' exit from the Paris Climate Agreement, and the lack of necessary changes in environmental policies in developed countries, we are nearing catastrophe. As mentioned above, the most affected are peoples already vulnerable and impacted by socioeconomic problems such as poverty, hunger, racism, colonization, and violence. For the purpose of this research, I interviewed nine fluent English-speaking members of Indigenous communities living in North America to explore the multitude of ways that climate change has impacted their lives. I believe the findings of this data could be beneficial to Tribal Nations and Indigenous communities' efforts to raise awareness and find solutions to adapt and mitigate the impact of climate change within their communities.

### *Situating the Indigenous Presence*

Indigenous Peoples have vastly different cultures, customs, and languages and are from every inhabitable corner of the globe. The term Indigenous Peoples refers to the original inhabitants, or the first known inhabitants, of a particular region or country. Across the world, Indigenous Peoples are also known as First Nations Peoples,

Aboriginal Peoples, Natives, and of course their own unique Indigenous names. For many Nations, this is the Indigenous name for “The People.” The United Nations defines Indigenous Peoples, as “inheritors and practitioners of unique cultures and ways of relating to people and the environment. The definition goes on to state that “Indigenous Peoples have retained social, cultural, economic and political characteristics that are distinct from those of the dominant societies in which they live (United Nations 2020).” This paper will focus primarily on Indigenous Peoples in the Pacific Northwest of North America.

Most Indigenous People have one thing in common, they have been impacted by the structures of settler colonialism and have had to engage in struggles to retain their sovereign right to their way of life, their lands, and their resources. An important aspect of colonial mentality is the concept of boundaries and borders. The walls of the culturally hegemonic society are erected as an attempt to hold up nations and keep out those seen as different. This label of “different” is most often reconstructed by Nation States as equating to dangerous. Indigenous Peoples were an unwelcome affront to the boundaries of newly stolen lands. Indigenous people were already everywhere the colonizers wanted to be. Every major feature of the land, including mountains, valleys, rivers, streams, animals and plants had Indigenous names and were a part of the Indigenous natural world. The simple fact that Indigenous Peoples existed was a problem for the colonizers. This problem of Indigeneity led to the genocide of many Indigenous nations and to the near extinction of many more. However, Indigenous Peoples persevere today in resistance and resilience.

When the Dutch, Portuguese, English and other Europeans set out to expand their empires, the settlers who came to stay collided with the Indigenous Peoples already living on those lands. The expansion of empires, settler colonialism, and genocide are all related constructs. Settler colonialism is a violent genocidal practice. As Patrick Wolfe notes in his work, settler colonialism is a structure and not an event, built on the desire for more land (Wolfe 2006). As Rosanne Dunbar-Ortiz wrote in *An Indigenous Peoples' History of the United States*, “in employing the force necessary to accomplish its expansionist goals, the colonizing regime institutionalizes violence” (Dunbar-Ortiz 2014:8). The institutionalized violence put into place in what is currently the United States were state sanctioned extermination policies, child kidnapping, forced assimilation policies and forced marches from homelands to reservations. Contemporary examples of institutionalized violence include corporations invading reservations for toxic waste disposal and resource extraction projects, often with the blessing of the Bureau of Indian Affairs and the Environmental Protection Agency both of whom are tasked with regulating and ensuring the well-being of Indigenous Nations and the lands of what is currently the United States.

These types of state sanctioned projects have often led to *ecocide*, which was first coined at a 1972 United Nations Stockholm Conference on the Human Environment in reference to the Vietnam War, and was further defined by the International Criminal Court as “the extensive damage to, destruction of or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished” (Short

2016:63). For Indigenous Peoples ecocide and genocide are indisputably linked because both are aspects of settler colonialism, a land-centered project with an underlying motive to eliminate Indigenous societies (Wolfe 1999). Elizabeth Hoover speaks to the link between settler colonialism and environmental racism by noting Traci Voyles's work, "Native American encounters with settler colonialism are so deeply entangled with environment and resources that even the phrase 'environmental racism' can seem to lose all meaning in a tribal context, quite simply because 'racism' has always meant environmental violence for Native peoples" (Hoover 2017:10). Acts of ecocide are often facilitated by the United States military on or near Indigenous communities. The Pentagon acknowledges responsibility for 39,000 contaminated sites and 141 superfund sites. The U.S. military is responsible for 10% of all superfund sites, far more than any other polluter (Sze 2018:222) and Indigenous lands are currently polluted with 532 superfund sites (Gilio-Whitaker 2019). These sites which are polluted with toxic and hazardous wastes, are often so deadly and carcinogenic that they threaten the lives and cultures of the people. The cleanup of superfund sites can take decades and costs can rise into the hundreds of millions of dollars.

Indigenous peoples have long held that there is a direct relationship between the health of the land and the health of the people. As Winona LaDuke notes, "there is a direct relationship between the loss of cultural diversity and the loss of biodiversity" (2002). Linda Hogan was also quoted as stating that, "Since 1900, more than half of the tribal people of Brazil have become extinct" (Ray 2016:107). The outright capitalistic assault on Indigenous lands by extractive resource industries, the dumping of toxic waste

on or near Indigenous homes, and the use of Indigenous lands for military weapons testing has continued from first contact to the present day. It is impossible to ignore the genocidal tendencies of these practices. A recent study done by First Nations Development Institute found that the majority of American Indians (54%) in what is currently the United States live in rural and small-town areas and 68% live on or near their tribal homelands (First Nations Development Institute 2017). Many Indigenous people continue to live off the resources that are available in their homelands, usually by hunting, fishing, and by the use of traditional agricultural methods. When these vital ecosystems are destroyed or become toxic, the people are disconnected from their culture and are forced to either eat and drink toxic foods and water, or resort to unhealthy consumer foods of the dominant society. The health of Indigenous people has been compromised by what Rob Nixon calls the slow violence of environmental degradation and ecocide (Nixon 2011).

Due to the intimate connection, Indigenous Peoples have with the natural world, the environmental health and human health connection is more pronounced. The dis-ease occurring in the natural world is also occurring in the People, because as Elizabeth Hoover notes in *The River Is in Us*, “Indigenous people view themselves and nature as part of an extended ecological family” (Hoover 2017:66). Hoover goes on to explain that for Indigenous people the “social body” is more inclusive than the average American community. When pollution and environmental degradation occurs, it affects the entire “social body,” causing dis-ease and diseases such as obesity, diabetes and cancers in Indigenous people (Hoover 2017). For Indigenous peoples, it is not difficult to see a clear

connection between environmental issues and Indigenous health problems as both being the results of the continued impacts of genocide and settler colonialism.

Indigenous Peoples in North America endured many shocking events and policies after contact with Europeans and their migration and colonization across what is now called the United States. The Introductory Chapter of this thesis explores the historical atrocity of genocide, settler colonialism, and the racial formations that justified these practices, concentrating primarily on what has occurred in the Pacific Northwest.

Resistance to cultural encroachment and hostility has been an ongoing part of Indigenous life in the settler states of the United States and Canada. The Indigenous Resistance Chapter discusses the history and present acts of Indigenous resistance to settler colonialism, genocide, and environmental degradation including climate change, paying close attention to what is currently called the United States and so-called Canada. The next chapter Theoretical Observations focuses on the theoretical perspectives that ground my research, including settler colonialism theory, decolonial theory, biopower, and ecological Marxism.

In the Methodology chapter, I illustrate how my work is centered on a qualitative decolonial insider methodology. I discuss my methodology in detail and explain how my participants were selected and interview questions designed. The next chapter From Settler Colonialism to Solutions: Themes From Research provides an analysis of my research and brings together the main concepts covered in my paper and the insights gained from the expertise of the Indigenous folks who provided input for my research. From Settler Colonialism to Capitalism connects the analysis of research data to the

theoretical frameworks included in this thesis. In the last chapter Research Conclusions and Future Directions, I close the thesis with concluding thoughts on the lessons learned and insights of future research needed to further explore the importance of centering indigenous experiences and knowledge in the fight for climate justice.



## BACKGROUND AND HISTORY

The myth of Christopher Columbus and the celebration of his “discovery” of the Americas (Columbus Day) continues today in 21 states and two territories of the United States. In response to decades of campaigns led by Indigenous Peoples to disprove the discovery myth, many cities and states have transitioned the October holiday to honor Indigenous Peoples. Columbus’s journey to the Americas initiated one of the largest genocides the world had ever seen, facilitating the slave trade and the eventual rise of capitalism. Census of Indigenous populations did not occur until the decades after contact when likely hundreds of thousands had already been killed or died from disease. Rosanne Dunbar-Ortiz in *An Indigenous Peoples’ History of the United States* places the total population of the Western hemisphere at about 100 million at the end of the Fifteenth Century, prior to encroachment by Europeans. Two-fifths of this population inhabited North America, including Mexico. Central Mexico alone is reported to have had a population of thirty million (Dunbar-Ortiz 2017:17). In a 2019 study utilizing a variety of measures, including the mean of documented ethnographic counts, Koch, Brierley, Maslin, and Lewis place the pre-invasion population at more than 60 million (Koch et al. 2019). Native scholar Jack Forbes placed the population at 80 million pre-invasion (Forbes 1996:41). Europeans brought with them their thirst for land, slaves, and resources and it was this thirst as well as European diseases that took a toll on Indigenous Peoples. Some studies conclude that the population decline in the Americas in the century after contact accounted for a 90% decline of the total Indigenous population and at least a 10%

decline in the world's population. In fact, Koch, Brierley, Maslin, and Lewis reported that the depopulation of the Americas after contact, aptly called the Great Dying of the Indigenous Peoples of the Americas, brought on atmospheric cooling as a result of so many lives lost (Koch et al. 2019). These statistics confirm the need to use the term genocide when discussing the loss of Indigenous lives in the Americas. In this paper, I will concentrate primarily on the impact of European contact in the Pacific Northwest.

The first accounts of Europeans in northern California occurred in the latter half of the eighteenth century. There are accounts of ships seen in the ocean near Indigenous Yurok villages in the sixteenth century; however, they did not make landfall. The Spanish and, to a lesser degree, Russians began to impact Indigenous Peoples in the Pacific Northwest around 1770. It was during this time that the Spanish created their mission system and began their assault on the lives and cultures of Indigenous California Peoples, severely impacting those living between what is now Sonoma County and San Diego County. Northern California Peoples were protected by the rugged terrain of the area which dissuaded the Spanish from attempting to erect missions in the North. Invasion by Europeans in Northern California truly began in the mid-nineteenth century when gold was discovered at Sutter's Mill, on the American River near a town that is called Coloma. Prior to this, Indigenous Peoples outnumbered Europeans at least ten to one. With the Gold Rush came a flood of European settlers hoping to strike it rich in Northern California. With a disregard for Indigenous lives these settlers began to eliminate Indigenous Peoples in any way that they could. They also brought their diseases, such as smallpox, into the Pacific Northwest. Population estimates for Indigenous Peoples in

California prior to Europeans ranged from 310,000 to 705,000. Most scholars agree that by 1845 the population had dropped to 150,000 and then to less than 30,000 in 1870 (Chatterjee 1998). In spite of the tragic loss of Indigenous lives and a century and a half of extremely detrimental official United States Indian policy due to European Colonization, Indigenous People remain. Many Tribes began bringing back cultural practices in the 1960's and 1970's which they had been forced to hide for more than a century.

The invasion of Indigenous America in the fifteenth century was made by people possessing a very different cultural belief and practices than Indigenous peoples. Indigenous ontologies, or ways of “being” emphasize the inseparability of humans from other living things, the features of landscapes are seen as sentient and significant beings. The environment is treated as a living dimension of society and culture. Kyle Whyte, Chris Caldwell, and Marie Schaefer describe this connection in terms of relationships, and the quality of relationships, between humans and the nonhuman world in their essay “Indigenous Lessons about Sustainability Are Not Just for *All Humanity*.” They describe the importance of the quality of relationship and how the reciprocal relationship between the nonhuman and humans “strengthens human motivation as the benefits of taking responsibility are physically manifest” (Whyte et al. 2018:149). Simply put, Indigenous peoples have always known that when humans care for the environment the environment will care for humans with food, materials, and other gifts. Russell Means in the preface to

Jace Weaver's *Defending Mother Earth*, (1996) spoke about the absence of this

knowledge in European thought:

From our traditional ways, we know that we do not have the right to degrade our Mother and that we must live in harmony with all creation. The Europeans' lopsided emphasis on human beings at the expense of the rest of the created order and their presumptuous assumption that they are somehow outside the chain of interrelatedness of all things have led inevitably to imbalance and disharmony and will result in a readjustment that will cut arrogant human beings down to size, give them a taste of that ultimate reality that is beyond their ability to manipulate or control, and restore balance and harmony. Earth, she will retaliate, and her abusers will be eliminated...many of our prophecies tell us that (Means 1996).

In this paper I argue that capitalism, a product of the European invaders, plays a significant role in the degradation of Indigenous peoples and the Earth. Both sociologists and political scientists have connected neoliberal capitalism to our planet's rapid environmental degradation and the demise of Indigenous populations, particularly since the industrial revolution. In her study, Jodi Melamed (2011) details the shift from a white supremacist modernity to a postmodern Western World that is officially antiracist, but with normalized racial violence when People of Color get in the way of the Capitalist free-market. Currently, there are many wars occurring over global resources, such as the oil wars in the Middle East and fights between Indigenous Peoples in Latin America and the corporations that are expelling them from their lands for monoculture palm oil production. The structures of settler colonialism force Indigenous People to struggle against capitalist corporations and governments that continue the forceful takeover and poisoning of their land and water supplies.

From the start, Europeans brought with them beliefs and customs that were informed by Christianity and laced with white supremacy. This Eurocentric lifestyle and mindset was officially sanctioned through the Doctrine of Discovery and concepts such

as “manifest destiny.” Settler States such as North America and Australia claimed that Indigenous frameworks of sentient ecology meant that Indigenous People were “wasting God’s bounties,” conveniently creating a manifest destiny ideology that combined religion, white land ownership, displacement and genocide of Indigenous people, and a slavery driven capitalist economy (Samson and Gigoux 2017). The Doctrine of Discovery, which originated in a papal bull (Declaration from the Pope), stated that European nations would acquire title to the lands they “discovered,” and the Indigenous inhabitants would lose their rights to it. This doctrine was first used by the Portuguese monarchy to seize West Africa in 1482. After Columbus’s infamous voyage in 1492, another papal bull was written claiming that the land in what is now eastern United States and parts of the Caribbean would belong to Portugal. A few years later a dispute between Spain and Portugal’s claim to the lands led to the Treaty of Tordesillas which stated that only “non-Christian” lands fell under the Doctrine of Discovery.

Official United States Indian policy has been constantly evolving from the time of contact and the dissolution of British rule in the colonies after the American Revolution. This transitional process has ranged from an official policy that recognized the independence of Tribal Nations and the need to create treaties between nations (United States and Tribes) during the fifteenth century to the early nineteenth centuries to policies of relocation, allotment and assimilation in the nineteenth and early twentieth centuries. In the next section I will briefly outline federal Indian policy.

The Colonial Period of Federal Indian policy in the United States is defined by a seemingly egalitarian relationship between the newly established government and the

Indigenous Independent Nations that occupied the land. This period can be said as lasting from the late fifteenth century to the eighteenth century. During this period, we saw treaties established and often broken, wars between Indigenous Nations and the United States military, and occasional and brief periods of peace when it was convenient for the colonists. This period was marked with a sharp decline in Indigenous populations and a rapid increase in European population, and patterns of settlers invading Indian territory and taking possession of the land. During this time period, Indian Nations were officially seen as separate nations and negotiations were supposedly solidified by treaties. Indian Nations were militarily strong and seen as a threat by settlers and the United States military. Laws were also passed to protect against the taking of Indian lands secured by treaty although few of these laws were followed and the rapid expansion westward was encouraged.

The relocation and reservation making era of Indian policy occurred from the early nineteenth century to the late nineteenth century. During this time period the “removal of eastern Indian tribes to the West,” became the official policy. The infamous Indian killer Andrew Jackson in his fifth annual message to Congress stated, “they [Indians] must necessarily yield to the force of circumstance and ere long disappear.” He signed the Indian Removal Act in 1830 (Indian Country Today 2013). This law led to a treaty that forced the Cherokee, Choctaw, Muskogee, and the Seminole Nations, followed by all other Indigenous communities from east of the Mississippi River to relocate to Oklahoma “Indian Territory” and led to the theft or destruction of thousands of acres of Indigenous farmlands and many Indigenous communities. During this Jacksonian period,

the United States made eighty-six treaties with twenty-six Indigenous Nations between New York and the Mississippi forcing at least 70,000 people to march on what would be called, “The Trail of Tears” (Dunbar-Ortiz 2014:110).

The discovery of gold in several western states, including California, and the completion of the Transcontinental Railroad led to further expansion by European invaders as well as the slaughter of the buffalo, a key Indigenous food source. The slaughtering of the buffalo was state sanctioned through US policy which directed the army to destroy the Plains Indians’ most important food source. This annihilation of an entire species was done in order to create Indigenous economic dependency. Tens of millions of buffalo were killed within two decades, bringing them to near extinction and leaving only a few hundred left by the 1880’s (Dunbar-Ortiz 2014:142).

On the West Coast, rather than slaughtering buffalo to end Indigenous people, the State of California and the federal government engaged in explicit exterminationist policies. Official policies of genocide were established and these policies included bounties for body parts that proved Indigenous People had been murdered. Different payments were given depending on the sex and age of those killed. Volunteer militias, sanctioned by the federal government and the newly formed State of California, were formed to carry out the massacre of California Indians in the mid nineteenth century. In 1851 and 1852 the State of California paid close to \$1 million dollars for the killing of

California Indian People, and was reimbursed this amount by the federal government (Risling-Baldy 2018:62).

On March 7, 1863, an article was published in the Humboldt Times regarding the formation of four to six companies of volunteers called the California Mountaineers for special service:

to rid the county forever from the curse of Indians at the expense of the Federal Government. The article advertised an extra \$5 per month salary in addition to bounty and a land warrant. The notice goes on to state, "The Indians once exterminated or removed, our county would soon take its place among the most flourishing in the State. Her immense tracts of fine grazing lands would soon swarm with herds of cattle, horses, and sheep; her population would more than double and hardy frontiersmen would again retire to the places that have been laid waste by the savage in the last few years (Van Kirk 2010).

When the practice of killing Indigenous peoples began to be seen as uncouth in white society, forced assimilation policies were put into place. Some policies used miscegenation practices, including measuring "Indian blood" according to strict blood quantum in order to eventually "breed out the Indian blood," eliminate trust responsibilities and treaty rights, and ultimately open up reserved lands for settler use (Garrouette 2001).

In 1871 the U.S. Congress passed a law that stopped additional treaties with Indian tribes and Indian tribes were no longer seen as independent nations; this act ushered in the Assimilation era. Assimilation policies included child abduction for



indentured servitude, compulsory boarding schools, religious conversion and other methods to eliminate the “spirit of the Indian.”

### *American Indian Boarding Schools*

The boarding school system was a key tool in the effort to assimilate American Indians. This system initiated across the United States during this time period and at least 14,000 children were taken from their parents and forcibly enrolled. Compulsory enrollment of all American Indian children in Indian schools became official policy in 1891. The intent behind these practices was infamously stated by Richard Henry Pratt, the founder of the Carlisle Indian Industrial School in Carlisle, Pennsylvania when he said his school would, “kill the Indian and save the man” (Dundbar-Ortiz 2014:151). Physical and sexual abuse was the norm rather than the exception in these schools. During this time period, policies were enacted that established an official one quarter blood quantum which determined who was Indian and who was not. This translated to at least one parent having half American Indian blood, or both parents having one quarter Indian blood, etc. Although many tribes have updated their official requirements for membership, approximately thirty-seven tribes in the so called United States still use this one quarter or more Indian blood quantum for determining membership qualification. This restrictive racial classification was essentially a way to rationalize ethnicity and breed American Indians out of existence, and further the logic of elimination as a way to

open up more land for white settlement. This ideology will be expanded upon later in this paper.

Like most Natives in North America and other colonized countries such as Australia and New Zealand, my own family was heavily impacted by the Indian Boarding School system. My great-grandparents were born in 1887 and 1888. By this time the Carlisle Indian School had been enforcing compulsory education for Indian children for a decade and it was spreading across the country. Prior to 1898, the Phoenix Indian School, located in North Phoenix, Arizona (now a historical site named Steele Indian School Park) along with other schools, had limited their compulsory recruitment to children living in proximity of the schools. That all changed in Phoenix, when an overzealous school superintendent named Samuel McCowan with influence in Indian Affairs, and a desire for a larger budget, decided to recruit hundreds of students from at least four states including, Arizona, New Mexico, California, and Oregon. By 1899, 700 students were enrolled in the Phoenix Indian School making the school the largest second to only Carlisle Indian Industrial School. The new influx of students, which included my grandparents (my grandmother and grandfather were both around ten and eleven years old when they arrived), came from the Hoopa Valley and Round Valley, in Northern California; Perris and Mission Agency in Southern California; Carson City Agency and Eastern Nevada Agency, in Nevada; Klamath Agency in Oregon; Albuquerque and Santa Fe Agencies in New Mexico; and several reservations in Arizona (Trennert 1988). My grandfather was taken from the Klamath Agency school and my grandmother from the reservation school at Fort Gaston in the Hoopa Valley. My grandmother lived to be 103

years old and I was lucky to be able to spend precious time with her. She did not speak much to me about her experience at the school, likely due to the trauma involved, but she and my grandfather were forced to stay at the school for more than a decade, even marrying and having their first child at the school. Sometimes she spoke about her life before the school and being attacked by white men while she worked driving a mule train in the Northern Californian hills. She said she was forced to stab the man with her long hat pin until he left her alone. Another memory that she shared with me was one in which her father dug a tunnel from their house to a small woodshed in the backyard, so that she and her sisters could escape the drunken soldiers from the “dry” Fort Gaston in the Hoopa Valley who, when they were on leave from duties at the fort, hunted down and raped Indian girls and women outside the military occupied Hoopa reservation. Her justified aversion to white people is still etched in my memory.

During the late nineteenth and early twentieth centuries, many local Northern California Indigenous children were kidnapped or otherwise coerced to go to any number of schools, from the on-reservation schools, such as Hoopa or Round Valley or to schools far away, such as Chemawa, in Oregon or the Perris Indian School in Southern California, which was moved from Perris to Riverside in 1902 and continues to operate today as Sherman Indian High School.

#### *U.S. Government and Indian Land Policy*

The next era of Indian policy was the Allotment and Assimilation period, which lasted from the late nineteenth century to around 1934. During this approximately 40-

year period, official United States policy enforced Indian assimilation into white society. The allotment of Indian lands was a major driver of this era and resulted in the loss of millions of acres. United States policy dissolved communally owned lands into smaller, fractured, privately owned parcels and the majority of these were quickly lost to the government for taxes or bought for less than market value by white settlers. This time period is marked with an extreme disruption of culture and loss of lands.

The Indian Reorganization Act (IRA) was passed in 1934 and ushered in the Indian Reorganization era which lasted through the early 1950's. The IRA was said to be enacted to protect remaining Indian land bases and encourage Indian tribes to adopt constitutions and engage in a type of self-governance modeled after the United States federal government. Because this act provided cookie cutter constitution models and a template for organizing like a white government, this act has been criticized as being paternalistic, ethnocentric, and insufficient (Harvard Law Review 2016). The United States government then in another attempt to eliminate tribal nations all together, created the Termination Act to terminate the federal trust status of American Indians and their lands.

The Termination Era occurred in the 1950's through the late 1960's. The termination of tribal federal recognition was widespread during this timeframe. The act of terminating tribal sovereign status and the erasure of treaty protected rights such as health care, hunting and gathering, and education was a clear practice and structure of settler colonialism and a direct assault on the indigeneity of Native peoples. During this time 109 tribes were terminated as sovereign tribal nations and all services, and government

trust benefits were eliminated. When I was born and as a child, my Tribe had not yet litigated and won our suit to be reinstated. This meant that my father, siblings, cousins, and a few thousand other Klamath, Modoc, and Yahooskin Paiute Indians were not considered Native American in the eyes of the federal government. The Klamath Tribes were not reinstated as a federally recognized tribe until 1986. This limbo of being Indigenous, but not recognized as having sovereign rights still exists today for many tribes that were left out of the recognition process or not reinstated after termination.

Termination took millions of acres of land out of trust status and eliminated benefits and services for terminated tribes and individual Indians. The Klamath Tribes of Oregon was the second tribe to be terminated after the Menomonee of Wisconsin. The Klamath Tribe alone lost 1.8 million acres after termination. West coast tribes were hit particularly hard by termination. Of the 109 tribes terminated, 62 were in the state of Oregon. Additionally, 98% of all individuals losing their status as Indians were from Oregon tribes (Thiele-Cirka 2006). Forty-one California tribes also lost their trust land and were no longer eligible for federal Indian benefits and services.

The Relocation Program was enacted in 1956 enticing thousands of American Indians to urban centers with the promise of jobs and training. Many American Indian families now living in urban areas moved there due to Relocation Programs. California's Bay Area cities, Portland, Oregon, and Seattle, Washington were all West Coast destination cities for these programs (Burt 1986). The purpose of these programs was to remove Native peoples from their land, resources and cultures and quickly assimilate them into poor inner-city minority neighborhoods, in hopes that they would blend in and

any vestiges of their “Indianness” would disappear. This was clearly yet another extension of genocide and settler colonialism.

The Self-Determination Act of 1968 paved the way for the Tribes to have more freedom in governance, education, and hiring policies. Federal policies were established that provided for Indian preference in federally funded positions that worked primarily with American Indians. During this time period, the Red Power Indian Movement joined other groups fighting for equality during the Civil Rights Movement. In the 1970’s and 1980’s tribes began to sue for the return of their treaty rights and were often successful. Of the 109 tribes terminated approximately 48 have won lawsuits to gain back their recognition as tribes. Unfortunately, only small tracts of land were returned, if the tribes received any land at all. In addition to the outright murder of Indigenous people, boarding schools, the outlawing of spiritual practices, and the enforcement of a particular form of government are all cultural extensions of genocide and settler colonialism.

### *Connecting Settler Colonialism and Native American Genocide*

Indigenous People were subjected to many forms of genocidal policies and practices through the centuries after the first settlers set foot in North America. Most, if not all of these acts, sought to exterminate Indigenous peoples, either physically or culturally. The structures of settler colonialism have had similar effects in the land that is now called Canada. Indigenous First Nations, Metis and Inuit Peoples are very much impacted by settler colonialism in all shapes and forms. The institutionalized racist projects and the abuse of women there is undoubtedly just as damaging. One symbolic

difference between Canada and the United States is the Canadian government's admission to the damages caused to Indigenous peoples and communities. The Indian Residential School system in Canada is known to have caused irreparable harm to Indigenous People. The last Indian residential school in Canada closed in 1996 and on June 11, 2011 the country issued an official apology to all Indigenous Canadians for the atrocities that occurred in the institutions (Restoule 2013). The United States still operates four off-reservation Indian boarding schools and has never apologized for what occurred in the hundred schools that operated between the mid nineteenth century and present day.

Due to the multifaceted and repeated patterns of atrocities committed against Indigenous Americans, it can be said that settler colonialism and its "logic of elimination" is a cultural structure and not an event (Wolfe 2006). It is also a cultural structure that has deep implications for environmental degradation.

### *Settler Colonialism, Environmental Degradation, and Gender Violence*

How does settler-colonialism connect to environmental degradation and climate change? The logic of eliminating Indigenous Americans in order to acquire more land for the settlers has also had the effect of putting new stresses on those lands. Bringing with them European methods of clearing native trees in order to build houses and pastures for livestock was just the beginning of the environmental harm that was to come in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Also imported were the capitalist ventures of gold mining and industrial timber harvesting. Long before invading and colonizing North America,

Europeans had an established understanding of the environment that conflicted with Indigenous Americans. Anglo settler-colonists considered the environment “wilderness,” a demon place to be feared and in need of taming. Indigenous Peoples on the other hand, did not believe that human cultural and material life and the environment were unambiguously separate. To this day ceremonies and cultural practices demonstrate the connection between the people and the nonhuman natural world. For many Peoples, this connection is built into cultures beginning with creation stories of how the world began.

Creation stories from many Indigenous traditions convey a story about the people being created out of clay, or coming out of caves from within the Earth, or of Sky People bringing the people to the Earth. Most of these stories carry common themes of respect for other lifeforms and a disdain for greed and taking more than one needs. These connections cross oceans and continents, languages, and cultures, and are common threads running through the veins of Indigenous Peoples around the globe. This connection to the land and a desire to protect it for future generations continues to result in intense struggles between colonizers and Indigenous Peoples.

The colonizers viewed the nonhuman world as threatening and potentially detrimental to their lives and sought to “conquer nature.” This viewpoint stemmed from biblical beliefs that described the “wilderness” as a place of danger, temptation, and chaos. The European colonizers drew on biblical texts, the Protestant work ethic, and white supremacy to push the ideology that Indigenous lands (and peoples) were wild and needed to be tamed (Nash 1967). The fact that Indigenous Peoples had not dramatically changed the landscape by clearcutting trees, plowing the earth, or damming rivers was



used to rationalize the theft of Indigenous lands. Although Indigenous Peoples occupied and were utilizing lands through use of traditional ecological knowledge, Europeans claimed that Indigenous Peoples were not properly using the lands and thereby could not be considered the rightful owners.

The Divine Mandate was first used by Puritan ministers to justify the theft of Indigenous lands, but as Colin Samson and Carlos Gigoux reference in *Indigenous Peoples and Colonialism* (2017), it became widely used when in 1689 John Locke wrote in *The Second Treatise on Government*, "...although they have had sovereignty, North American Indians did not have rights to any fixed property, a prerogative that could only be claimed through 'improvement of the soil' and labour." Locke went on to claim that in the Genesis chapter of the bible, "God who hath given the World to men in common, hath also given them reason to make use of it to their advantage and convenience" (Samson and Gigoux 2017:50). This rationale asserted that Indigenous use of the land did not constitute ownership and the English Puritans settlers could therefore take Indigenous lands for farming. Accelerated theft of Indigenous lands and increases in private lands fueled the capitalist economy and the slave trade in North America. Lockean principles were later encoded in "*The Law of Nations* of 1758 [which] provided a theoretical justification for Europeans to dispossess those who merely roamed" (Samson and Gigoux 2017:51). These legal doctrines and "rights of private property" were used repeatedly, effectively creating an international cover for the dispossession of Indigenous lands across the world.

The structure of settler colonialism which removed Indigenous peoples from their lands and attempted to erase any vestiges of Indigenous culture was also an attempt to recreate a tame treeless European landscape, where the colonizers could feel more at ease. Clearing forests for settlement began an uninterrupted environmental catastrophe that continues in both the global North and the global South today.

Ward Churchill (2003) studied the numerous breaches of trust which occurred over the last century between the United States Bureau of Indian Affairs and American Indian Tribes. Many of these breaches allowed for the degradation and poisoning of Indigenous lands. Included in his work is documentation of uranium exposure to Navajo Nation citizens near Ship Rock, New Mexico. This occurred after the Bureau of Indian Affairs approved the mining of approximately 2.5 million tons of uranium on the Navajo Reservation. This mining episode released at least 80,000 gallons of irradiated effluents per day into the Navajo water supply in the 1980's. The Navajo uranium disaster was not an isolated incident. The opening up of reservations to multinational corporations have and continue to be a source of income for governments. Often these corporations and the government officials they have bought, promise jobs and income for Indigenous populations struggling with unemployment and poverty. Historically, these deals have poisoned the people living there and destroyed the natural environment, while adding little to nothing in the way of economic security. As noted above, these actions are not only undertaken by corporations, but by the U.S. government as well.

In what is currently the United States, the U.S. military has been a major player in the lives of Indigenous Peoples. This precarious relationship began with the War

Department's executive policies of extermination, which existed in different forms into the late 1800's. The slow violence of ecocide continues with the practice of mining, nuclear waste disposal, and weapons testing on Indigenous tribal lands. Winona LaDuke (2012) studied the relationship between the United States military and Tribes, and how the practice of military testing and dumping of toxic waste on or near reservations, has impacted American Indians in North America. Her work demonstrates the long history of the United States military's onus for Indigenous environmental and social justice issues. The fact that these events are not isolated but far reaching, gives teeth to the argument that these environmental injustices are an extension to the structures of genocide and settler colonialism.

The structures of settler colonialism facilitated and naturalized the exploitation of Indigenous bodies. Indigenous women have been particularly vulnerable to violence and exploitation. Cutcha Risling Baldy speaks to this in her book *We Are Dancing For You: Native Feminisms and the Revitalization of Women's Coming-of-Age Ceremonies*, when she talks about settler colonialism's dependence on heteropatriarchal social systems. This system drew on "European lore that eroticized the Americas and Native peoples" dehumanized Indigenous women, and thus in European minds transformed Indigenous bodies into something to use and take without consequence of law or religious conviction. Europeans also recognized the importance of women in strengthening the bonds of Indigenous society and increasing populations through births and desired to break this vital link that continued the race. These aspects of Indigenous womanhood led to more violence against Indigenous women (Risling Baldy 2019:11).

Making a similar argument, Andrea Smith's work focuses on the sexual colonization of Indigenous women's bodies as a tool of genocide. Smith connects the sexual violence perpetrated against Indigenous women and the violence and degradation perpetrated against Indigenous lands in the introduction of her book *Conquest*, "sexual violence is a tool by which certain peoples become marked as inherently "rapable." These peoples then are violated not only through direct or sexual assault, but through a wide variety of state policies, ranging from environmental racism to sterilization abuse" (Smith 2005:12). This exploitation of Indigenous bodies through the structures of settler colonialism continues in much of the world today.

Leanne Betasamosake Simpson explains the moment she clearly saw the connection between settler colonialism, capitalism, land theft, and gender violence by saying in her book *As We Have Always Done: Indigenous Freedom Through Radical Resistance*,

colonialism or settler colonialism or dispossession or displacement or capitalism didn't seem complicated anymore. The mess I was wrapped in at birth didn't seem so inevitable. It seemed simple. Colonizers wanted the land. Everything else whether it is legal or policy or economic or social, whether it was the Indian Act or residential schools or gender violence, was part of the machinery that was designed to create a perfect crime - a crime where the victims are unable to see or name the crime *as a crime* (Simpson 2017:15).

Settler colonialism is system of normalized violence, a dishonest reality, that removes Indigenous peoples from their land, erases history from contemporary Indigenous lives, and is the reason there are thousands of missing and murdered Indigenous women and Two Spirit/queer people in the so-called Canada and the United States today (Simpson 2017:41). Yet, where there is racism, oppression, and abuse there

will always be resistance. Resistance is woven into the fabric of Indigenous lives. This long history of Indigenous resistance and its evolution is discussed in the next chapter.

## INDIGENOUS RESISTANCE

### *Protest as a Component of Indigenous Resilience*

Resistance through protest is a key way that people deal with adverse conditions. When individuals are confronted with situations that interfere with important aspects of their existence, resistance is inevitable. Throughout history, in many cultures and eras, protest and resistance have been invaluable in gaining freedom and rights for people. Frederick Douglass stated that “power concedes nothing without a demand.” (Douglass 1857) Thus power does not give up power easily and often acts of resistance have been met with violence; however, resistance continues and often successfully changes the world.

Indigenous Peoples play a key role in current global environmental and climate movements. With Indigenous Peoples’ long-standing history of resistance against the structural forces of settler colonialism, including the degradation of the land and water, it can be said that we are the original environmental protesters. The structures of settler colonialism and its constant need for the acquisition of more land, has had severe adverse impacts on not only Indigenous People’s culture and lifeways but on the land itself. These impacts have led to the formation of localized and global Indigenous environmental and climate movements. Although most Indigenous lands have been reduced in best-case scenarios to reserves and reservations, Indigenous cultures continue, for the most part, to be land-based and tied to the health of the land. The structures of settler colonialism are entrenched in the institutions of colonizing countries. Not only are

Indigenous people experiencing new adverse conditions in the way of capitalistic projects that damage the environment, but Indigenous people are impacted by the historic trauma of genocide and assimilation policies. The compounded and ongoing effects have led to a multitude of problems in communities, families, individuals, and for the health of the land.

The very act of resisting the structures of settler colonialism and participating in movements that protect Indigenous ontologies, including the natural world, works to strengthen the bonds weakened by the oppressive practices of the hegemonic white society and capitalism. Indigenous People who participate in environmental and climate movements are expressing their agency to protect themselves and their worlds. Research into this area of social psychology (Christians and Speer 2015) demonstrates that individuals belonging to organizations and movements are also gaining health and healing benefits, while working for social and environmental justice. Intergenerational Post Traumatic Stress Disorder (PTSD) has been studied (Quinn 2019) and there is significant evidence that indicators of trauma exist in individuals who have not experienced the trauma themselves, but have parents and grandparents who have experienced it. Social Movement and Community Organizing theory and analysis indicates that there are positive benefits at the micro and macro levels to being active in organizations and movements. Psychological research shows that community organizing promotes civic engagement, capacity, social capital, psychological sense of community, and psychological empowerment. All of these factors contribute to the well-being of individuals. Communities with strong participation in community social justice

organizations have indicators of a healthy community (Christians and Speer 2015). Thus, Indigenous led movements are vital in the fight for social and environmental justice and for the health of Indigenous communities.

Indigenous Peoples' unique relationship to the land, and United Nations recognized legal status has proven to be important, highly visible, and often successful in stopping the damaging effects of extraction resource industries. For some Indigenous Peoples, remaking communities and global societies through movement organization and policy, and other means, while utilizing Indigenous Knowledge Systems is beneficial on many levels. These actions can draw attention to critical environmental problems giving the land and waterways a voice and also may engage social and psychological healing properties in participants. In addition to protecting the planet's threatened sentient and non-sentient lifeforms, Indigenous environmental movements could also help to heal historic and adverse traumatic experiences in Indigenous communities. Due to the Traditional Ecological Knowledge that we possess, our treaty protected legal status, and our long legacy of resilience, Indigenous Peoples are uniquely situated to be leaders in the environment and climate movements. Many Indigenous People have answered this call and through their participation in movements; Indigenous Peoples are renewing the world for future generations. This work of leading movements to heal the planet validates the Indigenous ontology that "the health of the people equals the health of the land" and conversely "the health of the land equals the health of the people" (United Indian Health Services 2018).



Resistance and resilience go hand in hand. Indigenous resilience is different from the common definition of resilience. In most cases, resilience refers to bouncing back to an original state after adversity, however this definition assumes that the adversity doesn't cause lasting change. Indigenous concepts provide ways to approach adversity using a dynamic and systemic lens. Indigenous people are survivors, one need only look at the long history of colonization, including subsequent efforts of extermination, boarding schools and regimes of cultural suppression and forced assimilation to see complex patterns of survival. The associated quiet and dramatic methods of resistance and resilience emerge from these traumas and add to the collective wisdom residing in Indigenous Knowledge Systems (IKS). Kirmayer (2011) describes this resilience as, “draw[ing] on traditional knowledge, values, and practices but...also reflect[ing] ongoing responses to the new challenges posed by evolving relationships with the dominant society and emerging global networks of Indigenous Peoples pursuing common cause” (Kirmayer et al. 2011:85).

Indigenous resilience is rooted in culturally distinctive concepts of the person, the importance of collective history, the richness of language and traditions and the importance of individual and collective agency and activism. One core practice of resilience is transformative justice - the practice of transforming the conditions that make injustice possible (Peak Resilience 2018). Transformative justice can be accomplished only through the acknowledgment and affirmation of systems rooted in continuance. Through transformative justice, cancerous temporal systems can be dismantled in order to achieve sustainability in community and environment.

The strength, energy, and magic behind Indigenous resilience can be partially unpacked by theory. Theories of emergence and organization look at the processes that result in complex systems that are not fixed or static, but constantly adapting, often existing within conditions of instability, poised between the order and the chaos. Autopoiesis theory (Escobar 2017:172) reconceptualizes the relations of determination, requiring active engagement with other lifeforms (this reciprocity allows for an exchange of energy). Autopoiesis can be seen as the conditions that prepare systems (beings and communities) for confident relating and greater sharing. Escobar writes in the *Designs for the Pluriverse*, “In the case of subaltern communities, this preparation takes a lot of conjunctural thinking and strategizing (at times engaging in what to outside observers might appear like strategic essentialism or the defense of culture)” (Escobar 2017:172). Indigenous ontology and epistemology can be simplified into what is called Indigenous Knowledge Systems (IKS) or sometimes referred to as Traditional Knowledge Systems (TKS). Indigenous people are leading the Climate Movement and using Indigenous Knowledge Systems to look for alternative ways to address and interrupt climate change induced harm. IKS use ways of knowing, ways of being, and ways of doing which predate the state. They rely on organic, creative strategies that are community created and sustained in order to transform the root causes of violence and harm. Generations of knowledge passed down through DNA and culture are now helping to find creative solutions to stop the violence of climate change.

Many Indigenous oral histories tell stories of survival, adaptation, resilience, and an intimate connection to place, spirit, and other lifeforms. One method of Indigenous

resilience is the acknowledgment of cultural disruption and the making of futurity through storytelling and personal narratives. People use stories to make sense of their own predicament. Indigenous people, through storytelling, are able to draw upon a collective history, myths, and sacred teachings. These narratives often speak directly to the ruptures of cultural continuity that occurred with the systematic suppression and dismantling of Indigenous ways of life during colonization. Talking and writing about the structural forces of settler colonialism that resulted in a profound sense of dislocation and despair is part of the process of healing. Narrative resilience is used to circulate a communal dimension that articulates cultural power and strength and affirms the Indigenous knowledge systems needed in the future (Kirmayer et al. 2011:85).

What makes Indigenous Knowledge Systems enduring? IKS and Indigenous resilience strategies are situated in *community*. Indigenous communities exist in an ecological balance with the surrounding environment. These communities require a *moral economy* regulated by ideas of coexistence (Kirmayer et al. 2011). This moral economy lies in direct opposition to the temporal system of neoliberal global capitalism. Indigenous people have passed down this knowledge through our DNA, oral histories, as well as through art and culture.

Climate change, environmental degradation and the capitalist assault on Indigenous worlds, as well as the worlds of everyone, is the greatest adversity that we have yet faced. Indigenous people are coming together to resist the onslaught and protect what is left to protect. Elders and youth are passing down knowledge, empowering communities, and creating global awareness of what we are now experiencing and will

hopefully survive. Resilience in traditional knowledge, art, poetry, and song, produces the magic and methods of surviving the unthinkable.

### *History of Indigenous Environmental Protest*

Settler colonialism is a structure laced with violence and throughout post-invasion history Indigenous Peoples have sometimes been forced to meet the violence of settler colonialism with violence. As Roxanne Dunbar-Ortiz said in her book *An Indigenous Peoples' History of the United States*, “people do not voluntarily give colonizers their lives, land, resources, children, and their futures without a fight.” The structures of settler colonialism ensure that resistance is met by violence (Dunbar-Ortiz 2014:8). Throughout history, when American Indians defended themselves and won battles against the colonizers, these battles were called Indian Massacres and the news that Natives were cold blooded killers spread quickly, usually resulting in settlers and the United States military inflicting violent retribution upon other uninvolved Indigenous groups. When the United States military or groups of “vigilante” settlers wiped out dozens or more Indigenous Peoples, they were held up as courageous heroes in the media of the day. One notable exception was the article by a liberal sympathetic writer Bret Harte. He received news that dozens of Indians who were mostly women, children, and elders were viciously killed at the village of Tuluwat on Indian Island, which lies across a narrow inlet of the Humboldt Bay next to Eureka California, by a group of local white men. He spoke about the inhumanity of the event in his February 29, 1860 article for the *Northern Californian*. His article was picked up and ran in two newspapers - one newspaper that would become

the San Francisco Chronicle and the other a popular New York newspaper. This article shed new light on the wars that were happening in “Indian Country” and soon after it was published people in San Francisco began calling Eureka “Murder Town” (Duckett 1954). After decades of educating the public on what happened on Tuluwat and renewing ceremonial dances there, the Wiyot Tribe was finally given back a portion of the island in 2019, by the City of Eureka.

American Indian wars and conflicts resisting the encroachment of settlers and interference by the United States and Mexican armed forces began in earnest in the fifteenth century and continued into the twentieth century. These wars occurred in virtually every region and were almost always about land, resources, and displacement. They usually resulted in the loss of many Indigenous lives and sometimes the deaths of notable United States military leaders. The loss of Indigenous life was great in these battles, due to the seemingly endless supply of military soldiers and arsenals. Some notable conflicts were the Pueblo Revolt (1680’s), The Battle of Little BigHorn (1876), the Shoshone Wars (1864-1868), and the Modoc Indian War (1872-1873). All of these are examples of Indigenous efforts to protect the lives of their people and the land.

Resistance continued from the first days of occupation until today.

A more contemporary well-known example of resistance was the occupation of Alcatraz. The occupation of Alcatraz occurred from 1969 to 1971 during the civil rights era in San Francisco, California. Mostly young and urban American Indians began to resist the effects of settler colonialism and demand civil rights for Indigenous People. The San Francisco Bay Area Indians of All Tribes coalition led the occupation of Alcatraz,

which was a new type of Indigenous resistance. This act of resistance was instrumental in initiating the nine-year Alcatraz-Red Power Movement (ARPM) led by and for American Indians. Alcatraz received significant international attention and publicity, led to large numbers of corresponding organized demonstrations, and brought to light many vital Indigenous grievances. Alcatraz was the beginning of a new phase in the struggle for Indigenous Rights. The activists who took over Alcatraz Island were said to be the warriors for the new age of American Indian civil rights in North America (Churchill 2003).

These warriors, as with others who engage in resistance to the state, faced a network of government institutions designed to achieve military and economic supremacy, including the Federal Bureau of Investigations (FBI), the United States military, police special forces, and in more recent movements private militarized security contractors. In order to conquer lands and defend the walled states, the United States, and to a much lesser extent other colonizing countries, have found it necessary to construct massive armed institutions to achieve and maintain domination. Over the course of 150 years, in the so-called United States Indigenous people were rounded up and driven onto reservations where they were confined and guarded by the army. The Bureau of Indian Affairs (the Office of Indian Affairs) was established in 1824 as an agency of the War Department.

In 1947, after the end of WWII, the National Security Act was signed into law, creating a postwar national security framework. This Act entailed a merger of the War Department and the Navy Department into the Department of Defense and also created

the Joint Chief of Staff and the Central Intelligence Agency (CIA). While the Federal Bureau of Investigation would police the internal working of the nation, the CIA would do so throughout the rest of the world. This Act can be seen as the birth of the modern security state (Perry 2018). As a consequence of being outside the confines of “normal” the police state demands that “others” be monitored and treated as a potential threat. In the eyes of the United States, Indigenous peoples have always fallen into this category.

Another arm of the government deeply involved in Indigenous protests and movements is the Federal Bureau of Investigation’s Counterintelligence Program - COINTELPRO. COINTELPRO is notorious for inserting operatives into movements, for instance the American Indian Movement, to gather intelligence and dismantle Indigenous resistance efforts. In Latin America, the Central Intelligence Agency is known for their intelligence operations and infiltration into the ranks of resistance movements. The CIA’s efforts serve to disrupt resistance and further the US agenda of power and control over oil, gas, governments, and other resources. The fact that these events are not isolated but far reaching, gives teeth to the argument that environmental and social injustices faced by Indigenous peoples are an extension of the structures of settler colonialism and genocide. However, after 150-500 years of survival and resistance to the pressures of the colonizers, Indigenous people are still fighting for the environmental health and restoration of the planet. Although surveyed, injured, killed, threatened and incarcerated, Indigenous people are on the frontlines of local and global environmental movements and practicing resistance through both conventional and unconventional ways.

As Arturo Escobar eloquently wrote in *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*, Indigenous (and feminist) activism is often about,

An ethical and political practice of alterity that involves a deep concern for justice, the radical equality of all beings, and non-hierarchy. It's about the difference that all marginalized and subaltern groups have to live with day in and day out, and that only privileged groups can afford to overlook as they act as if the entire world were, or should be, as they see it. In the interstices of resistance, people are "living fearlessly with and within difference (Escobar 2018).

Indigenous resistance strategies for environmental causes are tied to a decolonial political ontology. This ontological way of being examines strategies that are focused on defending the Earth. This decolonial trajectory rearticulates the colonial difference of Indigenous and non-Indigenous worldviews. Unlike colonial concepts of a detached and hierarchical scale of life, Indigenous ontologies place the Earth and all life forms including people, as interconnected and affecting each other in a multitude of ways.

Indigenous Resistance is rooted in the fight against the ontological occupation and destruction of Indigenous worlds by the globalization project. In recent decades, Indigenous people have led many major battles with governments over resource extraction in the United States, Botswana, Brazil, Paraguay, Peru, Canada, Columbia, Congo, Guatemala, Indonesia, Kenya, Nigeria, Philippines, and West Papua (just to name a few). It is clear to most Indigenous Peoples and allies that the time to fight is now, while simultaneously creating local sustainable economies in preparation for what is to come next (Samson and Gigoux 2017:134-136).

In response to the changing climate associated with capitalist resource extraction industries and settler colonialism, Indigenous groups and environmental organizations are



uniting to increase public awareness about melting ice and eroding homelands, and creating policy changes to protect the environment. Due to the sheer magnitude of the climate crisis, climatologists, social scientists, nonprofits, and monitoring agencies have all been sounding the alarm in recent years.

Although the rights of Indigenous Peoples continue to be infringed upon by governments and multinational corporations, some progress has been made in the way of Indigenous civil liberties. In some cases, protests and lawsuits upholding treaty rights have stopped the progress of oil and gas projects in the Global North and the Global South. In her book *This Changes Everything*, Naomi Klein (2014) dedicates a chapter to looking into how the unique rights of Tribes can be key in stopping governments from allowing oil, gas, and coal corporations from continuing to emit toxic global warming chemicals into the atmosphere. In her study, she looks into a continuing partnership between Sovereign Nations, environmental organizations, and climatologists in creating grassroots demonstrations to help rein in the destructive power of capitalist energy industries.

Indigenous Nations in the Pacific Northwest have been active in fighting for their treaty rights to gather, hunt, and fish and in doing so have been able to limit oil rigs and coal trains around the waterways of Puget Sound (Norman 2017). In 1974, the Coastal Salish won their first case to uphold their rights included in a treaty in 1855. The Lummi and neighboring tribes have repeatedly used their rights to ensure clean rivers and healthy fish harvests. Emma Norman's (2017) "Standing Up for Inherent Rights: The Role of Indigenous-Led Activism in Protecting Sacred Waters and Ways of Life, " focused on

Pacific Northwest tribes on the Salish Sea and Puget Sound. Norman's work centers on personal, tribal, and collective Indigenous activism and how activism has been utilized by the Salish Nation to defend treaty rights. Norman's study brings up an important point; by simply practicing traditions and defending treaty rights, Pacific Northwest Indigenous communities such as the Lummi Nation and neighboring tribes, have become successful leaders in the fight for social and environmental justice. This study also analyzes Indigenous cosmology and relationship to the natural world and how these are the foundation of many Indigenous belief systems. All aspects of Indigenous culture collectively result in a strong desire to protect the land and water (Norman 2017). When these natural resources are threatened by extraction industries as they have been, Indigenous Peoples in the Pacific Northwest have fought for their treaty right for clean water and healthy sustenance practices and have built strong Indigenous environmental movements against the industries who are polluting vital waterways and creating the bulk of climate changing toxic emissions.

Much like the occupation of Alcatraz, the 2016 resistance movement to stop the construction of the Dakota Access Pipeline (DAPL) on the Standing Rock Sioux tribal homelands in North Dakota, was an important public conscious raising struggle that was followed by the entire world. Karyn Mo Wells (2017) wrote extensively about the NoDAPL Movement in her study which analyzed the movement through the use of Indigenous cosmologies. Well's article unpacks the Indigenous cultural view of seeing the natural world as a part of ourselves, or as our "ancestors." Wells connects this cosmology to the lengthy NoDAPL movement on the Standing Rock Sioux Reservation.

Her work reveals the “Water is Life” movement through a sociological, historical, and participatory lens. Rather than calling NoDAPL a protest, the participants were adamant that they were not protesters but *protectors*. This concept of being a protector is crucial to understanding Indigenous participation in environmental and climate movements and is outlined more in depth in the Wells study.

Thousands of people of all ages, ranging from youth to elders in their 80’s, participated in this movement to protect the water. The water protectors at Oyeti Sakowin Camp on the Standing Rock reservation experienced traumatic and extensive police and military violence. In addition to the physical violence used against the protectors at Standing Rock they were also attacked stealthily through the use of digital signal surveillance, communication interference, mass data seizure, and electronic bugs by Morton County police, Dakota Access Pipeline’s (DAPL’s) private security force TigerSwan, and/or the National Guard. This is a clear demonstration of how the structural forces of settler colonialism are tied to access for more land, resources, and capital and is operating at the present moment. Indigenous Peoples are faced with violence and resistance when exercising their treaty rights. It is a constant struggle for Indigenous Peoples to have their rights upheld and still today these efforts are met with racism and violence. The strength it takes to continue to fight for these rights for hundreds of years speaks to the strength and resilience of Indigenous Peoples.

Just as the Occupation of Alcatraz gained worldwide attention for Indigenous social justice grievances, the #NoDAPL, Water is Life movement at Standing Rock brought global attention to Indigenous environmental and climate resistance efforts. In

their documentary, *AWAKE: A Dream from Standing Rock*, Josh Fox, Myron Dewey, and James Spione (2017) filmed the movement and interviewed the Water Protectors at Standing Rock. Their documentary also explores the connection that Indigenous participants living at the camp have to “the sacred” or all lifeforms. Their film follows the event for the entirety of the movement, which lasted nearly a year. This documentary captured Indigenous activists and their allies as they resisted security forces and fought to stop the construction of the DAPL pipeline. This and the neighboring Keystone XL oil pipelines are still a contentious issue. DAPL was eventually stopped by the Obama administration in 2016 and then reversed by the Trump administration in 2017. During the most violent days at Oyeti Sakowin Camp, before the EPA shut down the pipeline extension, President Obama responded to a question regarding the violence between Protectors and law and military enforcement and replied, “we’re just going to let this play out for several more weeks...” That is, we will let the violence continue through the structures of capitalism and settler colonialism. This comment coming from the United States first Black President seems to validate Patrick Wolfe’s (2006) argument that “settler colonialism is relatively impervious to regime change (402).” In late October of 2019, the connected line of the KXL leaked 1.4 million liters of crude oil in North Dakota demonstrating the validity of the Water Protectors grievance. If the pipeline leaks near a water source like the Missouri River, under which it is slated to be piped, it could potentially poison the water source for the Standing Rock Tribe and for 17,000,000 other people living downstream.

What Klein (2014), Norman (2017), Wells (2017), and Fox (2017) all point out in their works, is the important part that Indigenous activists have played in the struggle for environmental and climate justice in protests and movements throughout the world. The underlying message embedded in these acts of resistance all point to the deeply rooted connection that Indigenous People have with their homelands. This innate desire to protect the land and water for future generations is in direct opposition with the structures of settler colonialism. In their work, Klein and Norman also demonstrate that the unique relationship and inherent rights held by Indigenous Nations have the strength and momentum to continue to be critical in fighting against extractive resource industries and the governments that allow them to continue to escalate the Climate Crisis.

Indigenous peoples are natural leaders in the fight for environmental justice and protection of the land, ecosystems, water sources, and more than humans. We lead protests and resistance struggles sometimes lasting for months and years. In our current state of planetary environmental crisis, these struggles have become a regular part of Indigenous life. Now in the face of imminent and potentially catastrophic climatic events, Indigenous Peoples continue leading the world by uniting in protest against the governments and corporations that are contributing to the emissions problem and refusing to stop natural resource extraction. This refusal is tied to the profit and power-hungry characteristics of capitalism, which inherently ignores impacts to people (particularly othered bodies) and the environment. Indigenous people and allies are now demanding a transition to clean energy sources and restorative ways of living.

*Indigenous Leadership in the Climate Movement*

When thinking about the leaders of the Climate Movement, most people immediately think of the unofficial youth ambassador from Sweden, Greta Thunberg. At just seventeen years old, Greta deserves much respect for the amount of attention that her “Friday Strikes for Future” and her no-nonsense speeches have gained for the movement. However, before Greta was sitting out of classes with her signature sign “Skolstrejk For Klimatet” there were Indigenous, Black, and Brown youth taking action. The call for environmental action has been strong in Indigenous communities for decades and are most often led by young people. Much of the urgency for Indigenous action has been due to the extensive climate changing extractive resource industries that are often placed on or near tribal lands. Indigenous youth have stood up against their governments’ lackadaisical stance on the issue and the extractive industries that suck nonrenewable carbon from the Earth and spew greenhouse gases into the atmosphere. One notable Indigenous youth who has been fighting for climate justice locally, regionally, and globally is 15-year old Autumn Peltier from the Wiikwemkoong Unceded Territory of what is currently called Canada. When she was just eight, Autumn began to notice the toxicity of some of the waterways around her home and at just 12-years old Autumn confronted Canadian Prime Minister Justin Trudeau and persuaded him to promise to protect the waters. Now four years later, she is still on the frontlines protesting oil and gas companies and participating in the International Climate Movement. Another notable Indigenous activist is 18-year old Indigenous Ecuadorian Helen Gualinga. She has been a

part of the Climate Movement and has been fighting against oil and gas companies and deforestation her whole life (Asmelash 2019). These are just a few of the literally thousands of Indigenous youth activists on the frontlines of the movement. It is important to note that while Greta's work is extremely admirable, she herself has come forward and noted that the attention she has received has been disproportionate. The media blasting coverage of a young white activist, while ignoring the work of Indigenous activists, is yet another extension of the structures of settler colonialism. However, it has not just been Indigenous people or youth who have noticed potentially devastating damage occurring to the planet. There have been many attempts over the past four or five decades to slow the damage caused by neoliberal globalization. In 1972, 114 countries came together in Stockholm, Sweden for the first International Conference on the Environment. This conference created the Stockholm Declaration, an Action plan with 109 recommendations and a resolution focused on reversing the damage caused by human interactions with the environment. Unfortunately, as we can see with the progression of environmental degradation of the planet and the current climate crisis, international laws are rarely upheld by corporate controlled governments.

In December of 2019, the COP25 Climate Conference was set to be held in what is currently Chile. It would have been the first time that the conference was located near a largely Indigenous population in the Global South. Due to widespread protests started by young Chilean students protesting a transit fare increase they could not afford on top of the costs of their privatized education, the conference was moved at the last minute to Madrid, Spain. After the move, many Indigenous activists were not able to attend. The

fact that the conference was moved from a mostly Indigenous country to the country of the Global South's colonizers, did not go unnoticed and this was discussed during the COP25 by Mafalda Galdamas an Indigenous organizer for the World March of Women and activists from the environmental justice organizations: Climate Justice Alliance, Indigenous Environmental Network, and It Takes Roots (Climate Justice Alliance 2019). Although the summit was moved, Indigenous Chileans and others participated by taking to the streets in Santiago and marching for climate justice simultaneously with activists in Madrid.

The continued injustices and loss of Indigenous life since contact and the increased environmental devastation of the Earth, including the climate crisis, has necessitated the need for constant Indigenous resistance and action.

This resistance has been ongoing and persistent for hundreds of years and is born out of the desire to survive. Many Indigenous Peoples are working from within academia to resist the powers at be and facilitate the dissemination of knowledge in order to change prevailing thought to include Indigenous solutions that may help in healing the People and the planet. In the next section, a framework of sociological theory is used to unpack the many social forces that are contributing to the impact of climate change in Indigenous communities.



## THEORETICAL OBSERVATIONS

### *Indigenous Decolonial Theory*

It was my intention to rely heavily on the existing work of Indigenous scholars in my research in order to minimize the colonial thought processes found in historical research, as well as to hold up and honor Indigenous academics and intellectuals such as Roxanne Dunbar-Ortiz, Leanne Simpson, Cutcha Risling Baldy, Nick Estes, Elizabeth Hoover, Winona LaDuke, Kari Norgaard and the others to whom I am indebted. However, there are still many articles and books written by non-Indigenous historians, sociologists, and environmentalists that are considered foundational and important and I have referenced them throughout this work as well. Because the threads of settler colonialism and imperialism are woven throughout much of our history it is necessary to constantly question and evaluate whether using these studies upholds colonialism or truly works to decolonize academia. When works written by non-Indigenous people have been used in this thesis, I have used decolonial theory and critical reflexivity to analyze whether the material is useful and effective in my research.

Indigenous decolonial theory is extremely useful when trying to unpack and make use of the existing historical work which has more often than not been written by and for white society. These histories which claim to provide an actual account of what happened in North America after the invasion by European colonists provide a Eurocentric view of what occurred. Indigenous Peoples, while playing a role in these historical accounts, are

usually depicted as primitive and unintelligent. These imagined characteristics were often used as an explanation as to why Indigenous Peoples were so heavily impacted by colonization and lost 90% of their population, rather than the genocidal acts committed by colonial settlers (Koch, Brierley, Maslin, and Lewis 2019).

Another angle that non-Indigenous historians and scholars have used in their writing is a sympathetic point of view which romanticized Indigenous Peoples rendering us childlike and helpless against European encroachment. Neither the primitive savage nor the romanticized innocent images, both of which evolved out of an Imperialist gaze, tell an accurate or just account of who Indigenous Peoples are and what we experienced. Because of this Indigenous academics and intellectuals have been writing our side of the story for decades. Attorney, professor, and scholar-activist Vine Deloria, Jr. was instrumental in bringing to light North American history from an Indigenous perspective, beginning with his book *Custer Died for Your Sins: An Indian Manifesto* (1969) and ending with *The World We Used to Live In*, published in 2006 the year after he passed away. Vine Deloria, Jr.'s first book became an important driver and tool in the Red Power Movement which blossomed the same year the book was published during the Civil Rights Movement. Although not often credited as such, I would argue that Vine Deloria, Jr. was one of the most notable Indigenous and decolonial theorists of our time. His work thoroughly and consistently provided a critical analysis of North American history, politics, anthropology, and research. His writing provided a fresh Indigenous vantage to stories previously only described in a Eurocentric manner. Although highly intellectual, Deloria's work also demonstrated an Indigenous sense of humor that often

presents itself in the words and actions of many Indigenous people. This sense of humor and the humility that exists within it has enriched Indigenous cultures and communities for thousands of years and has also helped to make the unimaginable impact of colonization and genocide easier to manage. I believe this humor is vital in contributing to the resilience of Indigenous peoples. A critical part of decolonizing academia is undoing the centuries of bad and often unethical studies and writing new and fresh research that centers Indigenous perspectives.

Indigenous academics and scholars are important in the process of decolonizing history and academia. Linda Tuhiwai Smith, in her book *Decolonizing Methodologies: Research and Indigenous Peoples* (2012), stresses the need for Indigenous scholars to reevaluate the existing material and build upon it from an Indigenous centered standpoint. This process involves rereading, rewriting, and re-righting (Smith 2012:29).

When research and scholarship pertains to Indigenous Peoples and issues, it is imperative to utilize a decolonial lens that places Indigenous Peoples and Indigenous thought at the center of the work. This is what I have attempted to do in this paper. I hope that I have accomplished my research in a style that theorizes from a critical Indigenous studies stance and from an insider researcher standpoint. My research is grounded in critical Indigenous studies theory, settler colonial theory and decolonial theory. It is also influenced by the theory of biopower, racial formation, and ecological Marxism.

While it is impossible to undo the centuries of injustice that settler colonialism and unethical research on Indigenous persons has caused, centering indigeneity within critical Indigenous theory and research is essential. This allows us to trouble the layers of

racial inequality and oppression at play in colonized countries such as the so called United States and Canada, and begin to dismantle the structures of settler colonialism.

*The Biopolitics of Settler Colonialism*

Foucault's concept of biopower (Mogensen 2013) examines the strategies and mechanisms through which human life processes are managed under regimes of authority over knowledge, power, and the processes of subjectification. Biopower, as a concept, is useful in connecting settler colonialism to governmental institutions and treatment of racialized bodies in settler states. For instance, the 15<sup>th</sup> century is stained by the beginnings of the slave trade with its inhumane use and control of human bodies. The history of the occupation of North America by European settlers and the subsequent genocide of the Indigenous peoples living there can be viewed using Foucault's biopower. In 1492, when Christopher Columbus was commissioned to find the East Indies by Spain, he missed his mark by more than 10,000 miles. What he did find were islands in the Caribbean occupied by Indigenous People. Seeing an opportunity to capitalize on the burgeoning slave economy, he kidnapped a large number of people to take back to Europe. In the so called United States, 21 states still recognize Columbus Day as an official holiday, which is in itself a form of biopower and control. A day to celebrate a slaver, who stumbled upon Indigenous lands and set off the largest immigration that the world has possibly seen. The occupation of North America and the official policies put in place after the American revolution, by the newly formed

government of the United States, amounted to the systematic genocide of millions of Indigenous people. Genocide is perhaps the ultimate example of biopower.

Settler colonialism and the need for Indigenous People to disappear to open up land for whites, has come into discussion in the last twenty years beginning with Patrick Wolfe's article "Settler Colonialism and the Elimination of the Native," published in 2001. This article defined settler colonialism and its structures and laid the foundation for others to further theorize the extent of its impact in settler states around the world. Scott Morgensen in his article, "The Biopolitics of Settler Colonialism: Right Here, Right Now" (2013), does an exemplary job linking Foucault's biopower theory to Patrick Wolfe's settler colonialism. His work analyzes the way that settlers worked to eliminate Indigenous peoples from their land through "amalgamation and replacement" and established Western law and a new society on the land by "practicing an exception to the law that permits eliminating Indigenous peoples while defining settlers as those who replace" (Morgensen 2013).

European settlers did everything they could to eliminate all vestiges of Indigenous peoples, traces of our communities, lifeways, and histories and attempted to erase and replace all that was there with their own. The use of words such as "untamed lands, the frontier, the wilderness," are all aspects of settler colonialism and were used as tools to remove thousands of years of Indigenous life and create a new Euro-American society and history upon it. Morgensen points out that the biopower of settler colonialism is still working in contemporary North America and I believe the research provided in this thesis validates Morgensen's argument. Settler colonialism is entrenched in past and

present forms of European colonization and in global capitalism and state and international governance. Without noting that settler colonialism is an extension of biopower, it can be relegated to the past and naturalized as the inevitable progression of societies (Morgensen 2013).

The fact that settler law in colonial states, such as the so called United States, has written Indigenous peoples in as an exception to the law while actively pursuing their elimination points to the fact that it is a form of biopower. In his work Morgensen, drawing on the logic of Agamben, points out that in the foundation of law in settler states certain bodies are seen as *homo sacer*, “man who may be killed without being sacrificed or made subject to homicide” (Agamben 1998:3). Racialized laws place certain bodies, such as Indigenous peoples and racialized slaves brought to Indigenous lands for labor, in the formation of capitalism, as exceptions to, or outside, the law. This creation of and continuation of exceptions or ‘peculiar statuses’ of Indigenous and other racialized bodies, demonstrates that the structures of settler colonialism are contemporary and should not be relegated to the past. Some examples of this are the unique status Indigenous Peoples occupy in relation to U.S. federal and state law, and how our remaining Indigenous lands are held *in trust* for Native American Tribes. This land status implies that the land was given to Native American Tribes and not stolen from them. Racialized Western law is extended over the lands and the people in an exceptional way. Morgensen describes this, as “the biopolitics of settler colonialism establishes Western law within a white supremacist political economy premised upon the perpetual elimination of Indigenous peoples” (Morgensen 2011:57). This has been demonstrated

over and over throughout the history of "Indian Affairs" and in current events, for example the Termination Era of the 1950's and the current elimination of the Mashpee Wampanoag's trust land in March of this year (Mashpee Wampanoag Tribe 2020). It can also be seen when analyzing the governmental response and investigation (or lack thereof) into the thousands of cases involving Indigenous women who have been murdered or are missing in the United States and Canada. These are only a few examples of how Indigenous bodies and homelands are impacted by the biopolitics of settler colonialism. The structures and biopower of settler colonialism are still disappearing Indigenous peoples and their land.

The health of Indigenous lands and Indigenous bodies are negatively impacted by the biopolitics of settler colonialism and its imperative to eliminate. In reference to uranium mining on the Navajo reservation, Traci Voyles described settler colonialism as being, "so deeply about resources that environmental injustices, whether on Native lands or lands of other others, must always be viewed through the lens of settler colonialism" (2015:23). She goes on to state that, "settler colonialism is so deeply entangled with environment and resources that even the phrase environmental racism loses all meaning in the tribal context, quite simply because 'racism' has always meant environmental violence for Native peoples" (Voyles 2015:24). Part of this imperative to eliminate Indigenous bodies is directly tied to the voracious appetite of capitalism. It is to this consideration that I now turn.

*Ecological Marxism*

In my analysis of climate change and its impact on Indigenous communities, I find that the underlying causes of the climate crisis are very much tied to the structures of neoliberal capitalism and its ties to colonialism and imperialism. Since capitalism stands in direct opposition to the moral economies present in Indigenous societies, over the last few centuries it has been extremely damaging to Indigenous societies in the Global North. With the rapid expansion of globalization, it has more recently been ravaging Indigenous communities in the Global South, primarily through clearcutting and mining, on or near Indigenous lands.

Ecological Marxism theory, sometimes called Marxist ecology, is valuable in providing a theoretical framework for understanding the climate crisis in general. In the nineteenth century Karl Marx studied something he called the “metabolic rift,” or a rift in the metabolic exchange between society and nature (Foster, Clark, and York 2010:215). In his study, Marx wrote about what he called the “metabolic relation” between human beings and nature, embodied in production. This study analyzed an environmental issue that was occurring in the German countryside. The rich soil of the countryside was being stripped from the land and transported to the cities in the form of food and fiber, where they ended up contributing to pollution, rather than replenishing the soil (Foster, Clark, and York 2010:45). This study laid down a clear understanding that there is a “division of nature” under capitalism and that nature and the environment are impacted significantly by the effects of capitalistic societies.



Much of Marx's work studying the effects of capitalism on the environment was largely ignored by sociologists for the better part of the twentieth century. This refusal to acknowledge the ecological roots of Marxism was due to a splitting of Western Marxism from Soviet Marxism that occurred in the 1920's. Unlike Soviet Marxism, Western Marxism rejected the notion that nature was at the heart of Marxist thought. In recent decades, sociologists have reexamined and exposed the ecological foundations of Karl Marx, Frederick Engels, and Max Weber's work, finding deep concern over the harmful effects of capitalism on ecosystems and marginalized populations, such as workers and Indigenous peoples. In their book *The Ecological Rift: Capitalism's War on the Earth*, John Bellamy Foster, Brett Clark, and Richard York (2010) provide a quote from Marx's 1867 paper "On Capital, Volume 1," which demonstrates Marxist thought on the link between the damage of capitalism on Indigenous and Black populations and the environment:

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the Indigenous population of that continent, the beginnings of the conquest and plunder of Indian, and the conversion of Africa into a preserve for the commercial hunting of black skins, are all things which characterize the dawn of the era of capitalist production. These idyllic proceedings are chief moments of primitive accumulation.

This passage demonstrates the fact that Marx did indeed ponder the impact of capitalism on Indigenous peoples (Foster, Clark, and York 2010:349).

James O'Connor, while reflecting on Ecological Marxism, discussed the two contradictions of capitalism. The first is the "absolute general law of accumulation." The second is the "absolute general law of environmental degradation under capitalism" (Foster, Clark, and York 2010:207). This absolute general law of accumulation is

foundational in the concept of the “treadmill of production.” Using Allan Schnaiberg’s work (1980) as well as the work of Gabriel Kolko, Foster, Clark, and York (2010) provide an important critique of the state’s contribution to the environmental damage occurring due to capitalism. They explain that “corporations (the regulated) have captured the regulatory system...and by promoting military spending and an economy of waste, [the state has] expedited...accumulation (the treadmill) despite growing social and environmental irrationalities” (Foster, Clark, and York 2010:199).

Thus, applying Ecological Marxism to the issues at hand strengthens my argument that neoliberal capitalism is a primary factor in climate change, as well as an underlying factor for the expansion and continuance of the structures of settler colonialism around the globe. The impact of climate change is far reaching on Indigenous lands, due to the state’s involvement in deregulating corporations and facilitating toxic and climate changing extraction resource economies on or near Indigenous lands. Developed industrial countries should be held accountable to make immediate changes in their emissions of greenhouse gases and also provide needed funding and resources to assist with worldwide climate disasters and the plight of climate refugees. Because the structures of the capitalist free-market have such a stranglehold on the world and capitalism is tightly bound to labor, an eco-sociological solution to combat the effects of climate change needs to confront both of capitalism’s absolute general laws and form a labor-environmentalist alliance, in order to curb the environmental crisis, we are experiencing today. As I am writing this, climate change is creating tens of thousands of climate migrants and has the potential of creating millions

of climate migrants and refugees in the near future. In order to slow the progress of this problem, systemic institutional changes and a move away from capitalistic systems has to be made.

Ecological Marxism and theories that assign equal intrinsic value on all people, cultures, and ecosystems, such as deep ecology will be useful in breaking down existing structures and rebuilding a new global economy. By examining climate change, climate related disasters and climate refugees through a sociological lens, society will be better situated to mitigate the effects of climate change.

### *Racial Formation Theory*

Genocide and settler-colonialism are intricately intertwined. As Patrick Wolfe noted in his foundational article, “Settler-colonialism and the elimination of the native” (Wolfe 2006), genocide and settler-colonialism are structures that work on the logic of elimination. This logic of elimination requires the removal of Indigenous Peoples, by death, forced displacement, or assimilation in order to open up lands for new settlement. In addition to this, both are most often organized through racial formations. Omi and Winant define “racial formation” as “the sociohistorical process by which racial identities are created, lived out, transformed, and destroyed” (Omi and Winant 2015:109). A racial project is “simultaneously an interpretation, representation, or explanation of racial identities and meaning, and an effort to organize and distribute resources (economic, political, cultural) along particular racial lines” (Omi and Winant 2015:125). Genocide

and settler colonialism are obvious examples of racial projects that seek to eliminate a group of people who have been categorized and attempted to be eliminated in order to open up their lands for settlement.

American Indians differ from other racial categories, due to their unique status which provides that their race be defined by law (previously federal and now tribal). However, like Latinx and Caribe Peoples, the racial category of American Indian was born out of resistance to the denial of rights from those occupying their lands. Thus, the othering of Indigenous Peoples by those occupying the newly formed category of whiteness in the so called United States, impacted Indigenous Peoples similarly to those in other racial categories (Garrouette, 2001 and Omi and Winant 2015).

In *Salmon and Acorns Feed Our People*, Kari Norgaard points out that notions of nature also construct the racial identity of Indigenous peoples and other People of Color. Just as European invaders saw the environment as something wild and dangerous, they saw Indigenous peoples as being closer to nature and thus wild and primitive. It is from here that the concept of Native “savage” is constructed. Park and Pellow’s 2004 article, “Racial Formation, Environmental Racism, and the Emergence of the Silicon Valley” unpack this concept of racial hierarchy based on one’s relationship to the environment. Those who are placed at the bottom rungs of the hierarchy are ‘closer to nature’ and ‘allegedly’ more primitive. This form of racialization functions to diminish the rights of people...based on the ‘inferior’ racial category they occupy. This racist logic, which gives ethnic minorities an ‘animalistic’ quality, justifies the concentration of people of color in

jobs and residential spaces that are particularly ‘dirty’ or hazardous (Park and Pellow 2004:405).

Racial structures have been formed by dominating Western cultures through two pathways. The first pathway, explored extensively by Patricia Collins, is the Black/White continuum (Collins 2009). This socially and hegemonically constructed scale places people with darker skin on the bottom rung of humanity and whites on the top. Brown people land somewhere in the middle of this racist hierarchy. In this section, I would like to note another way that bodies are racially structured by hegemonic white dominated cultures, and that is through commodification of brown and black bodies. Since Black bodies were valued due to their enslavement and the enslavement of their future offspring, policies in the United States enforced the “one drop rule,” and any person with one drop of Black blood was considered Black, resulting in ownership of their bodies for the purpose of the slave economy (Collins 2009:144).

For Indigenous people, the opposite logic applied, however the racial classification was still steeped in ideologies of white supremacy. Indigenous peoples were measured by “blood quantum” usually needing one quarter Indian blood to be considered Indian and therefore eligible for any benefits. Kari Norgaard quotes Eva Marie Garroutte in her book *Salmon and Acorns Feed Our People*, “The ultimate and explicit federal intention was to use the blood quantum standard as a means to liquidate tribal lands and to eliminate government trust responsibility to tribes along with entitlement programs, treaty rights, and reservations. Indians would eventually through intermarriage combined with the mechanism of blood quantum calculations, become

citizens indistinguishable from all other citizens” (Norgaard 2019:38). Thus, blood quantum was also a critical tool of settler colonialism, as it furthered the logic that Indigenous Peoples need to disappear in order to open up lands and resources for whites.

### *Applying Theory to Climate Emergency Mitigation*

Capitalism is undoubtedly a failure in its ability to produce solutions for environmental issues, but for Indigenous people and other marginalized communities, it has been especially ineffective. In the next few pages of this thesis I apply several theoretical frames to a common free market based solution to mitigate environmental disaster on Indigenous lands. “Voluntary buyout programs” are popular in mitigation plans to relocate people impacted by climate change induced loss of land from sea level rise or flood. These programs are proving to be inherently biased against Indigenous people and poor people in general, and instead privilege affluent land owners. Buyout programs are modeled on a definitively anti-Indigenous methodology, entirely absent of any mention or consideration of collective land ownership or use. Buyout programs are market based and the use of them in impacted arctic Indigenous communities is extremely problematic. Buyout programs allow for the government to purchase at-risk homes in disaster areas at current market values. In Indigenous Alaska communities, due to remoteness, communal living patterns, and building material scarcity, it is very difficult to assess a home’s market value. Even when a value can be determined, the actual cost of rebuilding a home is often much higher than the assessed market value (Marino 2018).

The Indigenous Alaskan communities of Newtok and Shishmaref held tribal votes in the early 2000's, to relocate because of loss of land due to sea level rise and erosion. These two villages on the Pacific Ocean in Alaska have both been losing land at rates of fifty to seventy-five feet per year. Multiple homes have slipped into the sea and the communities anticipate greater loss in the coming years. Although some of the needed funding has been obtained through grants from the Federal Emergency Management Agency (FEMA), the money has been awarded in small amounts, making it economically unfeasible to complete the move (Wennersten and Robbins 2017:80).

The funding limitations and assistance efforts in Alaska are in stark contrast to the example of New Pattonsburg, Missouri where residents are 95% white. In 1993, after being destroyed by flooding, the entire town of New Pattonsburg was relocated to higher ground in just one year with the help of FEMA funds (Wennersten and Robbins 2017:81). The racial disparity in governmental management seen here can be analyzed using several theoretical logics. Andrea Smith's "Second Pillar of White Supremacy" and David Naguib Pellow's "Second Pillar of Environmental Justice" can be both applied to this situation. Smith's Second Pillar of White Supremacy is the logic of genocide. Following the logic of settler colonialism, the Second Pillar states that, "Indigenous peoples have always been disappearing and need to disappear in order to allow for non-Indigenous ownership of land, resources, Indigenous culture, and spirituality" (Smith 2012:2). While the white community of New Pattonsburg was prioritized by the United States government to be saved, Indigenous communities in Alaska and elsewhere are allowed to continue to feel the effects of genocide.

Pellow's "Second Pillar of Critical Environmental Justice" is a part of his Environmental Justice (EJ) framework which analyzes how scale, race, and difference play into environmental inequalities (Pellow 2018:14-16). With this framework, Pellow analyzes how race and scale are closely linked. Using climate change and its impact on Indigenous peoples and other people of color as an example, he notes how the impact of climate change may seem small and gradual when looking at the problem on a *zoomed out* global scale. However, if one looks closely at the impact in poor neighborhoods, *barrios*, and Indigenous peoples' lands, the impacts are visible and extensive (Pellow 2018). In these areas, people of color are dying from heat, dealing with flooding, and losing homes into the rising sea. I believe it is useful to use Pellow and Smith's theories simultaneously. Pellow points out that people of color are viewed as threatening by white hegemonic society and this leads to implicit bias in environmental vulnerability and government led mitigation efforts. Smith focuses on Indigenous people and unpacks how current environmental crises impacting Indigenous people are a continuation of white society's racial project of genocide (Smith 2005; Pellow 2018).

When analyzing the connection between environmental disaster, neoliberal capitalism, socioeconomic disparity and racism, we can see the links to who is most disaster vulnerable and who will likely not benefit from current mitigation and adaptation methods. In the case of disaster buyout programs and community disaster response, we can also utilize Margaret Sommers theory of contract based citizenship (Sommers 2008).

After Hurricane Katrina hit New Orleans in 2005 and killed 1,856 residents and then a decade later in 2017 Hurricane Maria devastated Puerto Rico killing 3,057



residents, the whole world was witness to the United States' response to these environmental crises. In both cases, we saw a lack of moral economy and the workings of citizen subject making (Ong 2003; Somers 2008; Lloréns 2018). Somers points to the idea that citizenship in the US has increasingly become market-based and contract based rather than rights based. The inequitable response to Katrina victims demonstrated which citizens were worthy of rescue and assistance and who had been demarcated as "second-class" citizens and were less worthy, by default. Somers' theory unpacks this idea of market based contractual citizenship by comparing the treatment and the rights of those imagined as a burden on society and those contributing to the free-market system. Somers concludes that the obvious disparity in rights and treatment in the US demonstrates that only those who are able to fully participate in the economy are idealized as true US citizens and beneficial and worthy of rights. Unsurprisingly, the vast majority of those who fall into this idea of free-market citizen subjects, are white.

Using these Keynesian and Hobbesian ideas of "market-based" citizenship in the US and the allocation of rights, it becomes apparent why Indigenous peoples, Blacks and Latin@s, Asians, the poor, the very young, and the disabled are disproportionately impacted and inequitably treated during and after environmental disasters (Somers 2008:87). Ong, who also has developed a citizenship theory, focuses primarily on race and the black-white continuum of citizen subjects. She states that, "for minorities and disadvantaged populations, the lived meanings of citizenship are completely entangled with such systems of exclusion, selection, and judgement" (Ong 2003:15). Although Ong is primarily referring to citizen subject-making in Asian immigrants, I find it useful in

unpacking the complex nature and racially biased US response to environmental disaster, including the climate crisis.

Researchers using vulnerability theory have demonstrated that where communities are experiencing the effects of climate change in explicit ways, there are often colonial histories, economic disadvantages, and political limitations that amplify the risks and effects (Martinich et al. 2013). Indigenous communities in Alaska are a notable example of the multitude of inequities at play in governmental climate change mitigation efforts. Homeowner buyout programs are an exemplar of how exclusionary many relief programs are. These programs were not designed to keep communities together. On Staten Island, residents were encouraged to find housing and relocate into New York City. For the *Iñupiat* tribal village of Shishmaref, to not live together and within their traditional territory would most likely cause irreparable harm to their culture and traditional lifeways. In the next section, I will briefly discuss a few more market-based solutions that are already demonstrating (through models or actual repercussions) to be harmful to Indigenous peoples.

The last decade has brought the climate crisis to the front and center of our collective attention, this fact has made it impossible for global leaders to ignore the issue. Campaigns to quell the implications or push off the blame to natural climatic changes is laughable in the science world. Governments and corporations' unwillingness to transition from an oil and gas dominated energy production to renewables, have led them to frantically try to come up with “quick-fix” solutions to slow climate change, without making drastic changes to the capitalist economy.

Geoengineering projects have been touted as a solution to cooling the planet. One method known as Solar Radiation Management (SRM) is one type of these multi patented “solutions.” SRM involves processes that deflect the sun's rays. One company’s project proposes to inject sulfur dioxide into the atmosphere and another would launch millions of reflective particles into the stratosphere in hopes that they would deflect the sun’s rays. These options hold many unknown ramifications and computer modeling shows that the sulfuric acid solution would likely increase global ocean acidification and increase extreme weather events, particularly on the continent of Africa (Klein 2014:127; Wetter and Zundel 2017).

Another set of solutions based on the market economy are carbon offset programs, such as the currently contested Reduced Emissions from Deforestation and forest Degradation program, nicknamed REDD. Indigenous climate activists have been involved in resisting carbon offset programs since they started to be discussed. The REDD project would link California’s carbon market to international programs. REDD would enable polluting industries to purchase carbon credits that would provide rainforest land owners incentives for not logging their forests in Latin America, in exchange for a license to continue to pollute in California. Indigenous activists from Latin America and environmental activists from urban cities in California, have been opposing REDD since it was first proposed in 2012. Indigenous rainforest Peoples state that they will be displaced and denied access to their lands through this program. They also state that the deforestation will only be moved to a different location or, due to corruption and lack of regulation, the lands will be logged anyway. Environmental activists in California are

opposed to REDD because it will allow corporations to continue to emit toxic gases in places where primarily low-income and People of Color live (Perkins and Soto-Carlin 2018). This year at COP25, Indigenous Peoples held banners and wore T-shirts proclaiming, “No False Solutions” and “REDD=Genocide.” Most of the leading names in the field of Social Science are in agreement that capitalism is an underlying cause of the climate crisis. When Audre Lorde stated, “for the master’s tools will never dismantle the master’s house,” she could have been talking about capitalism and climate change. It is unlikely that capitalistic solutions will solve the climate crisis (Foster, Clark, and York 2010:70). The most successful means to make change through history has been through resistance, adaptation, evolution, and survival.

Since first contact with Europeans, Indigenous Peoples and communities have been impacted from a complex combination of structural forces evolving out of the impact of settler colonialism and imperialism, grounded in white supremacy. Settler colonialism and its constant need for more land has changed the Indigenous landscape and imported environmentally devastating industries as well as foreign people into the lands of the original inhabitants. I believe that the theoretical framework provided in this thesis is helpful in untangling the ways that these structural forces have and are impacting Indigenous lives and communities.

## METHODOLOGY

During the process of writing this thesis, I have tried to keep in mind the words of Indigenous academics, such as Linda Tuhiwei Smith and others, and be consistently reflexive while conducting and writing this research and *doing* research a culturally sensitive and appropriate way. As an Indigenous woman researching the impacts of climate change in Indigenous communities, I am considered an insider researcher. I feel that this distinction has made the research a bit easier and I am sure less complicated than it perhaps would have been for a non-Indigenous person. However, as Tuhiwei Smith explains in her book *Decolonizing Methodologies*, some aspects of being an insider Indigenous researcher is more complicated. You must be accountable for your community and this can be a scary concept. There are also dangers in finalizing your research and writing. This passage explains some of the dangers and issues of accountability of “insider researcher” writing:

Writing can also be dangerous because we reinforce and maintain a style of discourse which is never innocent. Writing can be dangerous because sometimes we reveal ourselves in ways which get misappropriated and used against us. Writing can be dangerous because, by building on previous texts written about indigenous peoples, we continue to legitimate views about ourselves which are hostile to us. This is particularly true of academic writing... (Smith 2012:37)

While I have tried to keep this in mind, obtain well serving existing material and write in a style that decolonizes, I know that this thesis probably includes authors, quotes, and information that in the future I may find were not as serving as I had thought. I accept this probability and realize that different ideas and theories will evolve along the way during my journey as an academic writer.

The research for this thesis has been entirely qualitative and includes in-depth, semi-structured interviews with nine Indigenous individuals with direct knowledge of traditional subsistence and cultural resource practices in their homelands, as well as analysis of existing literature and research and some woven threads of my own personal knowledge and family history. About fifteen individuals were asked to take part in my research. Of these fifteen, I was able to find a compatible interview time with nine. The contact information of potential participants was collected in person, online through email and social media, and through snowball sampling methods, which involved obtaining the contact information of potential subjects from existing participants. Participants were emailed, messaged, called, or recruited in person. Individuals to be interviewed were selected because of their direct ties and knowledge of their Indigenous communities, level of active participation in traditional subsistence, cultural activities, or working in tribal natural resource fields.

A total of eight interviews were conducted with one of the interviews consisting of myself and two respondents. Face-to-face interviews were the goal of the research project; however, in-person interviews were often infeasible and telephone interviews were used instead. Two interviews consisting of a one-on-one and a one-on-two, were conducted in person. The remaining six interviews were conducted by phone due to time and geographic limitations. All of the interviews were conducted in places with auditory privacy. The interviews were then transcribed using a transcribing program called Otter.ai. After transcribing, the original recordings were destroyed. Also in accordance with the Institutional Review Board (IRB), verbal consent to record the interviews was

obtained at the onset of the interview, along with an explanation of the interview ground rules. Included in the pre-interview information discussion was an explanation that, “if an interviewee was not comfortable with a recording device being used, then the interview data was to be recorded through the use of note taking.” Participants were also asked if they agreed to have their names used and if they agreed to have their direct quotes used in the final paper. All participants agreed to being recorded, indicated they would like their names used, and also indicated that their direct quotes could be used in the final research. Participants were not asked to keep the interview confidential. Only the data that participants explicitly consented to sharing was used in the final research. The participants were also informed that if desired, they could end their participation in the research at any time, and their information would be deleted and the record destroyed. Signed or verbal authorizations for interviewees, transcribed interviews, coding memo notes, and journals of field notes were kept in a secure locked location, as outlined in the IRB.

My respondents consisted of six male identifying respondents and three female identifying respondents. They ranged in age from early 30’s to early 60’s. The six male respondents were from the Hupa, Karuk, Klamath, Miwok, and Okanagan Nations. The three female respondents were from the Hupa, Yurok, and Anishinaabe/Wyandot Nations. The Anishinaabe/Wyandot respondent spent much of her life in Humboldt County, California and the Great Lakes Region, as well as in Arizona near the Gila River Indian Nation. All of the nine respondents were active in one or more of the following areas of interest: traditional hunting, gathering, or agriculture; ceremonial practices; tribal

natural resource programs; or tribal government. All but one of the interview participants agreed to provide a brief biography and photo(s) for inclusion in this thesis:



### *Interview Participants*

Dixon Terbasket is a father and a Traditional Ecological Knowledge Keeper of the Lower Similkameen Band of the Okanagan Nation. He has worked for the Okanagan Nation Alliance in Wildlife and Natural Resources for the last thirty years. He is also a former Council member and organic gardener and is the primary hunter and gatherer for his family.



*Figure 1: Dixon Terbasket working with wood at his home.*

Dorothy Obie-Sylvia is a Yurok, Karuk, and Hupa skilled basket and regalia maker and mother of three who grew up in Hoopa Valley and now works as a Family Advocate for the Yurok Tribe's Health and Human Services Department. Her mother taught her to gather and weave when she was just eleven years old. She has been a practicing basket maker for twenty-five years.



*Figure 2: Dorothy Obie-Sylvia wearing a ceremonial basket cap.*

Ayukii, náa níthvuuyti Imshápaneech, karú náa vúra masuh'áaar-karuk'áaar.

Hello my name is André, and I am a Salmon River Native, a Karuk Tribal Member. I am from a family of Dance Leaders from the village of Kaatimiin, the center of the Karuk world, near the confluence of the Salmon and Klamath rivers in northwest California. I graduated from Dartmouth College with a degree in Sociology/Education and Humboldt State with a Teaching Credential in Social Sciences and Spanish. I am currently the Cultural Resource Specialist for United Indian Health Services (<http://unitedindianhealthservices.org/>) I live with my wife Wendy in Arcata California; my son Kyle is pursuing his degree at Cal-Poly Pomona.



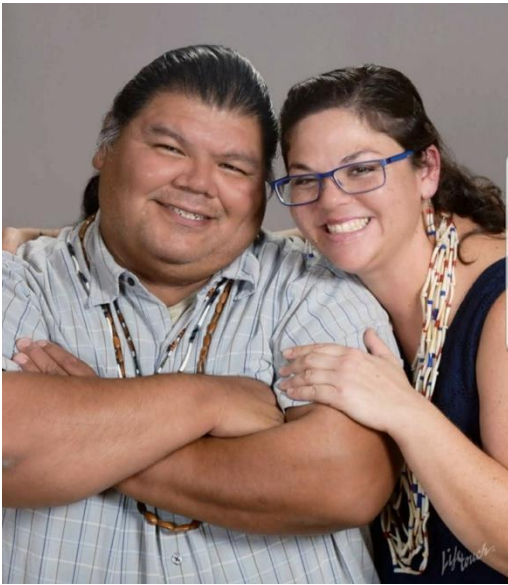
*Figure 3: André Cramblit wearing a basket medallion necklace.*

My name is Alfred Snow. I am a member of the Okanagan Nation and I reside on the Canadian side of it. I live just north of the Canada US border. I'm a Lower Similkameen Band member of the Okanagan Nation. I live here in the Similkameen Valley. That's where I am currently and I was born and raised here. I am a fisherman and a gatherer and have hunted a lot in the past. I am an Environmental Technician and I have a little over 20 years of experience doing environmental work.



*Figure 4: Two photos of Alfred Snow on the lake.*

Viola “Chummy” Brooks is a Hupa, Karuk and Yurok, enrolled in the Hoopa Valley Tribe. She has been involved in tribal and traditional activities her entire life and still regularly participates. She is a ceremonial singer and dancer. She is the mother of two and partner to Jerome “Jay” Williams. Chummy and her family have been holding the Brush Dance at Panamnik, a village near Orleans, California, and Flower Dances along the Trinity and Klamath Rivers for approximately the past twenty years.



*Figure 5: Photo of Viola Brooks and Jerome "Jay" Williams.*

Jerome “Jay” Williams is Miwok and a member of the Wilton Rancheria near Sacramento, California. He is the father of five girls and partner to Viola “Chummy” Brooks. Jay has dabbled in tribal politics and regularly participates in tribal activities. He is a ceremonial singer and dancer of the Round House and has been participating in Big Time ceremonies for over twenty years.

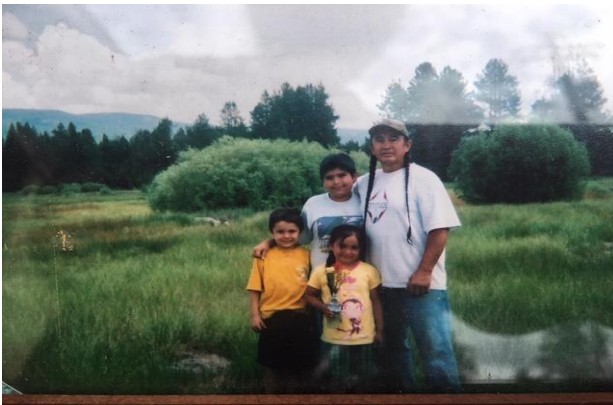
Dr. PennElys Droz, NDN Collective Director of Fellowship & Prize, is Anishinaabe/Wyandot from the US-Canadian border. Droz directs the planning, execution and evaluation of the NDN Fellowship & Prize. Droz brings two decades of experience in the Indigenous environmental and regenerative Nation building movements to re-develop ecologically, culturally and economically thriving and resilient Native Nations. She has a Bachelor's degree in Environmental Resource Engineering from Humboldt State University and a PhD in Biocultural Engineering Design, American Indian Studies from the University of Arizona.



*Figure 6: Photo of PennElys Droz wearing traditional earrings.*



Hi, my name is Robert “Bob” Paul Wilson and I am a member of the Klamath Tribes. I grew up in Fort Klamath, Oregon on the ancestral lands of the Klamath People. I have been a hunter and fisherman my entire life. My family are traditional dancers, beaders, and regalia makers. I teach and practice our traditional culture. I also teach young people to make dance regalia such as roaches and bustles.



*Figure 7: Two photos of Robert "Bob" Wilson with his children and grandchild, one at “camp” and one in regalia.*

### *Interview Design*

The interview design used a “semi-structured” format broken down into six sections. The interview questionnaire can be found in Appendix A. The first section, Traditional Subsistence Patterns, focused on the participant’s knowledge of the effects of climate change in their community and on their community’s traditional lifeways and cultural practices. This section was renamed Subsistence and Ceremony during the coding process. The second section, Economic Security, addressed participants’ economic security and how climate change has or hasn’t impacted participants ability to “make a living.” The third section, Personal Health Impacts, focused on the personal health impacts that may be occurring in their communities’ due to climate change. The fourth section, Government Efforts, focused on the interviewee’s awareness of any governmental efforts (tribal, state, or federal) that are currently underway or planned in their communities, to address and mitigate the problem of climate change and climate related emergencies. This section was renamed Government Mitigation Efforts during the coding process. The final section, Solutions, asked interviewees for their thoughts on possible solutions to the problems occurring due to climate change and whether they are aware and/or involved in resistance efforts to bring awareness to the problem.

While the interview questions were divided into five different categories, responses often covered topics in more than one area, such as Subsistence and Ceremony. The interview sections were used as overarching family themes in the coding process. Early analysis of the interview data revealed 21 general themes or codes falling under the overarching family themes. Through the analysis, I was able to collapse these into 12



final categorical themes: Seasonal Changes, Indigenous Knowledge Systems, Climate Emergencies, Hunting and Gathering, Health and Disease, Resistance, Capitalism, Fish, Drinking Water, Settlers (Whites), Emergency Management, and Resource Extraction. Although these twelve themes were utilized in my analysis, all twelve fall under the previously discussed five family themes which will serve as subchapters for the following chapter “From Subsistence to Solutions: Themes from Research.”

Out of these themes, participants were most likely to respond with information regarding Subsistence and Ceremony and/or Health Impacts, with 66% of text blocks coded falling under these two family themes. In the next section I will provide a thorough analysis of all the five themes, paying special attention to Subsistence and Ceremony and Health Impacts.

## FROM SUBSISTENCE TO SOLUTIONS: THEMES FROM THIS RESEARCH

### *Subsistence and Ceremony*

Traditional food sources are an important aspect of Indigenous culture and lifeways. The intimate connection that many Indigenous people have with our traditional lands is tied into the gathering and processing of our foods. Throughout this thesis, I have written about the importance of a healthy environment in sustaining the People. Everyone that I interviewed answered affirmatively to the question, “In recent years, have you or your family hunted, gathered traditional foods, or sustained yourself through traditional agricultural methods?” Most went on with little or no prompting to explain what type of hunting, gathering, or agriculture they practiced. The most commonly mentioned foods harvested were berries and salmon. One hundred percent of respondents said they regularly gathered berries and seven out of nine indicated that they regularly harvested salmon or other types of fish as a food source.

Eight out of nine respondents indicated that their traditional subsistence and cultural gathering practices had been impacted by climate change, or climate related crises such as drought and the warming of water bodies. Other reasons cited were logging, overhunting, and encroachment by settlers on tribal lands. Of those seven out of nine respondents who regularly fished, one hundred percent noted that in recent years they had noticed changes in fish availability that can be tied to climate change, such as warmer water temperatures and toxic algae in the waterways. Dixon Terbasket, of the

Lower Similkameen Band of the Okanagan Nation of British Columbia, had this to say about the rivers and fish:

Last year there was like a boom and then there is this year and people are struggling to get fish. I haven't even got a fish yet...But we're getting less and less of those big years. It might not happen for another four to five years. Even though we have all these programs to enhance [the fisheries], we're still seeing the water being too warm...We have this big lake, but the water coming into the lake is lower and lower and we're going to have landlocked salmon that want to go spawn in these creeks, but there's hardly any water. It's gonna be tough on the fish. There is very low water right now. So those kinds of things are happening with the fish, there's hardly any water. There's hardly no rain. There was no snow pack last year. I see a lot of different things happening. The fish are having a hard time getting back into their spawning streams. That's one of the biggest ones that's really obvious.

Dixon's statement is a perfect example of what David Pellow meant by his Second Pillar of Critical Environmental Justice and how spatial geographic scale of environmental problems and race are deeply linked. When examining the warming earth from a distance or from the security of a high-end suburb in Connecticut for example, it is difficult to make a link between the issue and how it is impacting people's lives right now. Because environmental issues related to climate change are primarily creating dangerous problems currently for Indigenous peoples, other People of Color, and the very poor, by listening to Dixon speak about the lack of water killing fish, we can clearly see the impact climate change is having on people right now.

Viola Brooks, from the Hoopa Valley Tribe in Northern California, said this about how much the availability of salmon has changed over the years:

My great grandma told me that the Trinity River used to have so many fish when she was a girl and she was born in 1919, in the mid 1900's... you could supposedly walk across the river on the salmon backs. That's how many salmon were in the river. I've never seen that in my lifetime. But in my lifetime, when I was a kid, I'd say probably ten... we would be setting-net to go fishing and you could see the fish swimming up and swim by you. And you could even pet them and you know, it depends if they are running, but the runs aren't that large. So, we still catch fish, but not like that. Like, I've never been in a situation like that in recent times, where there's been so many fish that you could feel them swim by you.

Viola's statement regarding the change in salmon runs over the years is one echoed by most Indigenous Nations in the Pacific Northwest. Over the past several decades the salmon runs have been smaller and less predictable due to a multitude of issues, with reduced and warming water being the most devastating on fish populations.

Eight out of nine respondents talked about regularly hunting deer, elk, or moose or having done so often, in previous years. Two interviewees stated that they had hunted in the past but had stopped because the availability of wild game had dropped dramatically over the past several years. Alfred Snow, of the Lower Similkameen Band of the Okanagan Nation of British Columbia, said:

That's one of the reasons I don't hunt so much anymore because there isn't as much to hunt...I found that the deer and the bigger game are just getting scarce in my area. The moose population declined by 70% in the last ten years.

Some respondents were concerned about the loss of wildlife that comes from the influx of people moving into their homelands. Jerome "Jay" Williams, Miwok from the Wilton Rancheria in the Sacramento region, cited overhunting as a reason for the loss of deer which, along with acorns, was a food staple for the Miwok Peoples. He said this during the course of the interview: "There's overhunting, you know, that has gone on since a lot of people have come here and they over hunt the deer population."

Overhunting and overdevelopment on traditional Indigenous lands is a perfect example of how settler colonialism is a contemporary problem and continues to detrimentally impact the lives of Indigenous Peoples.

A majority of respondents stated that they had noticed dramatic changes in their ability to gather foods and medicine in the last decade. This loss of food availability was

not isolated to Northern California or the Pacific Northwest; PennElys Droz, Anishinaabe/Wyandot, also noted a reduction in wild rice around Lake Superior. She had this to say about the rapid changes occurring:

Some folks have not been able to gather any rice or have any rice to share because of the fluctuating lake levels. There's not a consistent predictable lake level. That isn't good. And so, some years people can gather a lot of rice. And then some years, just in the last five or six years, it's actually been pretty startling, the speed at which people have noticed this big shift just within the last five or six years. There's been a lot of unpredictability about whether people are going to get good rice season or not. That's all transforming.

As is demonstrated by the statements of my interview participants, changes in the availability of traditional foods have been impacted by climate change and it is not a far stretch to extrapolate the way that the structural forces of settler colonialism have facilitated the environmental changes that are impacting Indigenous communities.

Many respondents noticed an actual change in the timing of seasons over the past few decades with traditionally harvested foods and materials being available at different times than they had in the past. Sometimes these changes impacted cultural traditions such as basketry and annual ceremonies. Dorothy Obie-Sylvia, Yurok, Hupa, and Karuk skilled basket maker who grew up in the Hoopa Valley, said she had noticed these changes.

Everything is about a month ahead...not behind, but a month ahead...like black fern, everyone said to get it in July, but now I can get it in June. Because it's warmer in June now than it probably used to be. When you look in those books...I think there is a calendar that is in Lila Morris O'Neile's book. There are different calendars in different books. So, they'll say gather your black fern in July, but I get them in June. They'll say get your hazel sticks in June, but they're ready a lot sooner than that. Hazel sticks are ready now in April. You know what I mean?

Dorothy's statement provides ample evidence for the environmental changes that have happened over the past fifty plus years since Lila Morris O'Neile had written her book on Yurok and Karuk basketry.

Viola Brooks who is active in ceremonial dances noted that gathering the necessary medicine for the dances had become more challenging during recent times.

Yes, we have to look harder and in different places. Sometimes it's like higher elevation where certain plants used to grow in certain spots every year. And then you go to your spots to gather that medicine, and it's not there. So, then you have to look more, or it's harder to find...And it's up higher. There are certain things, one random one is called Coltsfoot, and it is used for the Brush Dance. And so, my family does the Brush Dance. We haven't in the last couple of years. So, every year it's one of the main plants that's used by the medicine woman. And it grows by the creeks. So, some of the creeks are drying up. And so, where we used to be able to find it, it doesn't grow and we have to go to different spots. So, it's more work to scout it out and find the spot. And then sometimes you can scout it out early in the springtime and you're like, "oh it's there because that's where there's water." But then in June when you go to gather at that particular creek, it's dried up and the Coltsfoot grows by the water and wild ginger is another one. Creek spots are dried up for those particular plants that like water. And so, then they're not there.

Viola's statement focuses on how drought has had adverse effects on the traditional practices of gathering medicine for ceremony. The impact of drought was of high importance for the majority of the interviewees. Most participants spoke passionately about the issue of drought in their communities and how the lack of water has impacted the availability of traditional foods and cultural supplies. Many participants were also extremely concerned about how reduced water flows have added to the growth of toxic algae in the waterways. I will explore the impact of toxic algae more in depth in the next section, which focuses on health impacts.

Many of my interview participants are from the Klamath and Trinity River areas of Northern California. The damming of rivers and the reduction in water availability is a contentious subject in the Pacific Northwest. André Cramblit, Salmon River Karuk, spoke about the taking of the water through water pipelines that transport it to other regions of California.

Drought impacts us. It impacts us because we're in California and they want our water in the South. They take it from the North and that's where the dams come up as well. It's agricultural

areas that are trying to use it. Areas that it's not made for and no amount of rain will help...I mean it would take twenty years of rain to replenish the water [table].

The taking of water from Indigenous Peoples is a problem all over the globe. This vital resource is used to control people and water often becomes a commodity to be sold, something that runs counter to the beliefs of most Indigenous peoples. Preventing adequate water flows to Indigenous Nations, is a violation of Indigenous inherent rights and is also an extension of settler-colonialism and genocide.

Thomas Joseph, from the Hoopa Valley Tribe, had this to say about the double-edged sword of dams and drought.

We're just moving a couple of years out of the seven-year drought. Our Trinity River is a major contributor of the Sacramento River and people do not know it doesn't flow into the Sacramento, that water is stolen. And the reason why it's stolen is because Southern California needs water for their agriculture and for the big cities. The majority of our water is taken because of agricultural purposes. And they're not taking it to feed America like they try to scam us with. It's taken for the almond trees which are a huge waste of water. One almond takes a gallon of water and we say one almond takes a gallon of the Trinity's water and those almonds are shipped across the world...the primary consumers of our California almonds are not American citizens. And so anytime California is hurting for water, we pay the price for it. They take the water out of our rivers which decimates our salmon runs, and the tributaries to our rivers. And so, when California is experiencing the result of climate change and when they say we are going to experience more in the future it puts our community in threat, because they're stealing our water.

The dams and piped water from Northern California to Central and Southern California, which leaves inadequate flows in the North for a healthy river is an example of the devastating impacts of capitalism on the environment, as was discussed in the Ecological Marxism section of this thesis. Thomas Joseph went on to talk about Indigenous communities and lands that pay the price for the commodification of water and about the corporations who make billions of dollars of profit off it.

Now this water is sent to Westlands water district which is the largest water district in the world. And they pay zero for it. And they turn around and sell it for billions of dollars a year to agricultural farms and city municipalities. And I'm not saying we want that money because we don't, we want the water. But we have the rich elite that are making billions of dollars a year off

the back of starving our community of water. So, our water levels decrease which increases the killing of our salmon, the warming of our rivers, and not just the salmon but all the other animals that live along the river and in the river. And so, this climate change is a big threat to my community just because we know that the continual plague of colonialism that this state does against my people for their own protection of their capitalistic resources.

In the above quote, Thomas speaks to the impact of how capitalism destroys the environment and impacts his community and also how these acts contribute to the continuation of the effects of settler colonialism.

Alfred Snow, of the Lower Similkameen Band of the Okanagan Nation, spoke about the wildfires and severe flooding that has impacted his community and the animal populations over the last few years.

Well in the last couple years...Last year, that was a huge impact for us. There was a huge flood and it almost matched the biggest flood we've ever had here in recorded history. It came close to it. We were only a few inches off of the river levels of the highest ever recorded. And then the same year we had fires start here, due to lightning and it happened as the drought was starting and it grew to be the biggest fire in our province and now that's affecting us. So, it'll take a few years for the areas to regenerate and start producing food again. So again, that's affecting your hunting. And there's been mudslides in the mountains...and that affects the environment as well. The small shrubs that the animals normally eat are getting covered...Or they were a total loss being burned out...We had a couple of nice herds of deer in the area and they had to go somewhere else.

In the above quote, Alfred is talking about extreme weather events in his community and how these are impacting wildlife and his ability to feed his family through traditional means. Extreme weather events are directly tied to climate change. Climatologists are predicting an increase in extreme weather events if the warming of the planet continues at the current rate (Herring et al. 2020).

With nine out of nine interview participants stating that their ability to hunt, fish, and gather for sustenance, medicine, and/or materials have been impacted due to the changing climate, it is clear that these impacts are far reaching and impacting Indigenous



peoples on many levels. In the next section, I will explore the health impacts of climate change in my interview participants' communities.

### *Health Impacts*

All interview participants spoke about some way that their health, or the health of their community, had been impacted by climate change. Nine out of nine of my interview participants spoke about the impact of smoke from wildfires and/or toxic algae or other pollutants in the waterways affecting their health. Extreme heat was also a factor in the health of three out of nine participants. Temperatures are rising globally and anthropogenic activities are attributed with the warming of the planet. This global rise in temperature has been cited as being the primary reason that wildfires have been increasing in frequency and intensity (Williams et al. 2019). Scientists also reference fires burning over carbon dense areas as a contributor to climate change. These fires facilitate the release of large amounts of carbon based greenhouse gases into the atmosphere. Wildfires and the thawing of permafrost, which releases methane into the atmosphere, are unique in that they are caused by and also increase the problem of climate change (Nature Geoscience 2019). Wildfires have been particularly severe in the Pacific Northwest and so-called Canada, where the majority of my research participants live. Only one participant had not been directly impacted by fire or smoke near their homes. However, wildfires were a source of concern for everyone that I interviewed, including PennElys Droz, Anishinaabe/Wyandot, who had not been directly impacted but was aware of fires burning on the Canadian side of her traditional lands on Lake Superior, in what should be

a wetland area. All those who spoke about health impacts due to the severity of wildfires and smoke felt that their health and the health of their communities had been impacted negatively by forest fire smoke. Dorothy Obie-Sylvia spoke about the increase of incidents of asthma in her community.

Well I think we have a lot of smoke. You know this year we didn't have as much smoke. But all the summers in the past, it's been smoky every summer. I imagine that I am affected by it in more ways than I know right now. I probably have asthma. A lot of people do now. Year after year after year, it's been that way.

Thomas Joseph spoke about his extreme concern about the hazard of wildfire smoke in his community:

Within the last decade, we've seen the increase of smoke and sometimes the fires are close to us and sometimes they're, you know, over by Redding or over in Southern Oregon. But because of the way that our mountains are established and our valleys it'll sit in our valleys for days and days. It's quite a concern, the smoke from these fires...People get really sick and we have to evacuate our elders and children.

In the next quote, Alfred Snow contributes the increase of wildfire smoke in his community to his recent asthma diagnosis.

I developed asthma and they told me that it was due to being around the smoke. We had three summers of nothing but smoke here. And they said that I had asthma. And I work outside, I'm always outside. So, I spent three summers out in the smoke. They figured that was a part of it. It wasn't bad asthma, but they gave me an inhaler. I never used it. They said I did develop asthma.

The fact that asthma due to wildfires and pollution disproportionately impact Indigenous Peoples in their homelands and other People of Color primarily in densely populated cities, clearly points to the fact that there are racial inequities involved in protections from diseases such as asthma.

A third of my research participants noted that they were forced to temporarily relocate due to wildfires and/or the hazardous air quality caused by an inundation of smoke near their homes. Viola Brooks talked about the heavy smoke in the Sacramento

Valley during the Camp Fire of 2018. This fire was the most destructive and deadly wildfire in California history, burning the town of Paradise and killing eighty-six people (Nature Geoscience 2019).

When the Paradise fire was burning we had really bad air quality. We had to leave for the weekend to get out of the smoke...there was like soot and ash all over our cars. And Paradise is like...an hour and half away.

Wildfires have been increasing in number and intensity of the past few decades. 2018 was the worst fire season on record for California, with 8,527 fires burning 1,813,913 acres. In fact, 2018 was one of the worst fire seasons on record for many regions of the world, including the greater Pacific Northwest, Australia and Russia (Coogan et al. 2019). Jerome “Jay” Williams talked about the severity of the 2018 fire season.

And so, we have the Paradise fire burning over there then we had the South fire burning over there and the Buttes on fire over there. So, that's why the air quality was so bad. It just comes in the valley and sits.

Due to anthropogenic activities, the world is seeing steadily increasing global temperatures. As long as this trend continues without intervention, such as dramatically reducing the amount of greenhouse gas emissions that we produce, we are likely to continue to have extremely active and damaging wildfires. Traditional controlled burns, used by Indigenous peoples for thousands of years, were discussed by many participants as a solution to this and other issues (see Solutions section).

The next most discussed health impact concerned the quality of water. Many participants noted that toxic algae blooms were a top concern for them because these blooms make the rivers and other waterways undrinkable, unswimmable, and kill fish at

alarming rates. The largest fish kill occurred in 2002 when more than 35,000 Chinook Salmon and Steelhead died. Toxic algae thrive in warm shallow waters and over the past few decades water temperatures have risen in rivers, lakes and oceans. Combined with drought, the algal blooms have increased in the waterways and oceans of the Pacific Northwest. Robert “Bob” Wilson, said this about the increase of algae in the Klamath Lakes:

[I’ve seen] changes to the environment, yes. And the water quality. And the depth of it and the clarity of it. That’s all due to weather change and climate change. We have more algae in the lakes. You know warming up the waters and our fish are dying out there and it’s due to the algae. You know the people with the algae plants? They’re doing just fine (laughs). But our waters are going down and it’s getting toxic for our fish and our plants. So yes, that’s a big concern. A big concern for our water and the water quality and the water out there that is killing our fish and other animals in the water. And that’s an issue that we can’t [afford]. The suckers (fish), they’re just about extinct. We have biologists working on it but, if we don’t do something about it soon they’re going to go extinct. And that’s the livelihood of our people.

In the above quote Bob is discussing the impact of algae in the Klamath Lakes and tributaries. He speaks of the Lost River Sucker fish. This now endangered fish was once a staple food of the Klamath and Modoc Peoples. After settlers constructed dams and introduced cattle into the area, along with the effects of the warming climate, the Lost River Sucker fish are now endangered. This fish is so important to the Klamath and Modoc Peoples that there is an annual ceremony dedicated to them each year. This great reduction of such an important food source for the Klamath and Modoc People is an extension of genocide.

Viola Brooks spoke about the algae in the Klamath River and how it has impacted ceremonies.

As for the blue green algae. I know what it looks like. So, I make sure to not be those areas of the river that are polluted that bad, because they can make you sick. So, when we have a Flower Dance, and the Flower girls actually have to bathe in the river as part of the ceremony...some of

the villages where these dances happen there is a known spot where...they're supposed to bathe in the designated spot. And then if that's where the blue green algae is...she can't actually do her ceremonial bathing at that spot because it's unhealthy.

In this quote Viola brings up how toxic algae blooms in the Klamath River are impacting the ceremonies of Yurok, Karuk, and Hupa Peoples. For many decades, the ceremonies she is referring to were temporarily stopped or hidden because, along with the use of Indigenous language, they were outlawed and also dangerous. They were dangerous because white settlers were known to use ceremonial gatherings as opportunities to kill the people who gathered for them, as well as rape the women and girls who danced (Risling Baldy 2018). Now the extensions of settler colonialism and genocide are impacting the ceremonies in a different way, by reducing water flows and refusing to stop the emissions of greenhouse gasses which are creating toxicity in the water.

Interview participants also noted other problems with the potability of their water. Some of these concerns were about pollutants from the military, heavy metals from mining projects, livestock waste, and water toxicity issues related to illegal marijuana grows. These issues, although not directly tied to climate change, are certainly tied to environmental racism and the structures of settler colonialism and genocide. Because of the severe impact that extreme weather, wildfires, and other natural disasters have in Indigenous communities, most communities have emergency plans in place to plan for and mitigate these events when they occur. Many participants were aware of the plans in place in their communities and one was involved in preparing their plan. The next section discusses these plans and how they are working to help communities when disasters strike.

### *Tribal Climate Change Mitigation Efforts*

Climate change is an issue of epic proportion. Steps to mitigate the corresponding issues and to slow the warming of Earth need to be taken by everyone. Governments and governmental organizations, from the United Nations, individual countries, territories and states, Indigenous Nations, and cities and towns will all need to make changes to alleviate the risks, as well as prepare for climate related emergencies. About half of my research participants were aware of some type of climate emergency planning that was happening near their homes at either the tribal level or the city level. Alfred Snow spoke about his community's disaster plan.

Yes [we have a disaster plan], and actually I was part of it. I had to review the plan, the environmental part of it. And they've been really good about it. They've been getting emergency response plans for almost everything you can think of. And definitely for disasters.

...We have a small reserve on the other side of the river that is only accessible with a bridge. The bridge almost washed out and those people had to be evacuated. And then the fire was there that summer, so all those people had to be evacuated again, due to the fire.

Thomas Joseph had positive things to say about what his Tribe's Office of Emergency Services has done during emergency events. He spoke about the successful enactment of their plan when the reservation was inundated with wildfire smoke.

It's the Tribe that is usually the ones that are leading the charge. Buying air filters for all the homes and masks for everybody that's outdoors. And they're pretty good at it. I would say we're probably setting the pace for the rest of the nation, like the nation can really look to us and see, "how do you adapt and adjust to heavy smoke and the heavy fires?" We've been doing it for quite some time now. So, the mobilization and the levels, the standards...are always checked on. The educational materials that go out to the community to start warning them of what's coming and what level we're at, what you need to do as a community member to protect your own health and the health of your elders. It's a pretty good system that's been setup.

PennElys Droz spoke favorably about the city of Tucson, Arizona and the surrounding tribal communities' ability to plan and mitigate for disaster.

Yes, the city [has a plan]. I do know that the Tohono O'odham's is awesome. I don't know about the Yaqui...I do know that they actually have it, you know disaster planning. And they have been doing a lot of work creating a climate change response plan. Yea, I don't know too much about it. But the City of Tucson, one of the things that I appreciate about them is that they acknowledge the reality that they need to plan for it...as [it pertains] to water...I don't know about the other types of disaster planning that they might be doing, but they're pretty forward thinking as far as those things go. And I do know that the tribes, like the Red Cliff and the Bad River, the tribes up north are definitely like...I'm pretty sure that I've heard them talking about disaster planning and definitely climate change planning.

Tribal communities have thousands of years of experience preparing for and mitigating environmental disasters. This Indigenous knowledge is still in use and written into updated emergency plans (Tribal Adaptation Menu Team 2019). Indigenous communities are often leading the way in preparing for climate emergencies, as well as resisting the governments and corporations that exacerbate the situation. Compounding the issue of climate change and environmental degradation, as well as interrupting Indigenous rights to practice cultural traditions, is capitalism and the need to work within its framework. The next section discusses the way that climate change has impacted the economic situation in my interview participants' communities.

### *Economics*

Like most, Indigenous people are living in a capitalistic economy. We need to pay rent or mortgages, have car payments, phone bills, and grocery budgets. For decades now, a large percentage of jobs on or near tribal lands, or in rural areas in general, have been in natural resources. Droughts and fires, over extraction of trees, declines in fishing, and over development have all contributed to a decline in these types of jobs. Living wage jobs were already difficult to obtain in rural tribal areas, and these factors have

made the jobs even scarcer. André Cramblit spoke about this loss of jobs in his homeland and tied it back to environmental changes and the abuse of the environment.

Tourism industries are impacted along with the fisheries and timber harvesting and all that stuff. It's all integrated and it's been impacted. We've scalped the mountains for the trees and we're paying the dividends now trying to get back to where we were.

Alfred Snow talked about years without a steady income.

I'm an Environmental Technician and there are some years where there's very little work and I have to go find other work to make up for it. My job is very environmental. And if there's things happening, there's odd years where there is not enough fish. Like I do a lot of fisheries. That's my most predominant job. There's no fish. There's no work. There's been a couple years where that's happened, where I've had to go find jobs to make up for it.

Thomas Joseph discussed the need to shift directions from an extraction based economy that was put in place on Indigenous lands by the federal government to one that protects and heals the land, while dissuading white settlers from encroaching upon it.

Our economy is extremely...we have a high unemployment rate, sometimes we're up to seventy-five to eighty percent. So, with that comes the desire to use our resources for capitalistic gain. Our tribal council was originally established as a Business Council that the BIA, Bureau of Indian Affairs, told us that we had to have...their primary concern was to extract resources from our lands, so timber, and mining and those types of resource extractions were, were looked upon as ways, as the means to build a sustainable community and that...mentality has plagued our ancestral territories...so I'm not one to promote or push for any of type of capitalistic gain, especially not here in our motherland because of the destruction it causes...our values of a traditional culture is a culture based relationships sustaining the environment, that will be sustainable for generations to come...I know that my community does have deep roots to protecting the land, protecting what is ours. And so, when it comes to tourism, you know, we hired a CEO, it was a white guy, he wanted to come in and he's like, this is the most beautiful place in all of California, which I didn't disagree with. But he was wanting to turn it into a mini Disneyland, build waterparks. We have a gorgeous river and everything. And our community was like no, we don't want tourists here. You know, we don't want people here...Our community is primarily, ninety plus percent, People of Color. And so, you know, there's not very many non-Indians that live here. And the ones that are not Indians, even a small percentage of them are European Americans. So, we kind of like it that way.

In the above quote Thomas speaks to the way that Indigenous Peoples and his Tribe in particular have been forced by the US government to exist within a capitalist economic system. He speaks about the environmental impact that comes with gaining income from



the natural resources and describes how the Tribe was pushed to harvest and sell timber. The importing of an unsustainable economy based on natural resource extraction is a ploy that has been used across the globe on Indigenous lands. Settler colonialism is a structure built on a desire for more land and even after Indigenous land is reduced to a limited area, settlers desire to extract whatever they can from them. This issue of non-Indians controlling the harvesting of natural resources on Indigenous lands, such as the timber industry in the Pacific Northwest, has a history of being inequitable with few jobs going to Indigenous Peoples and the majority of the wealth going to the companies that log it. Because of this history, Tribes have instituted laws that provide preference to their own tribal members for contracts and jobs. However, the fact remains that no matter who profits off of the extraction and sale of natural resources, it is the People who ultimately suffer from the environmental impacts that these industries bring with them.

Dorothy Obie-Sylvia spoke about the way that she would be impacted if she were to try to make a living as a basket maker and how capitalism impacts other weavers' ability to have the time necessary to be a basket maker.

But I also think that for the baskets. That's what I mostly think about, right? Like I've been running a basket class now for three years. And what I can see is that a lot of women can't make it because they have to work. So, the economics affects it, you know what I mean? People are doing other things to make a living. People can't make a living off of baskets. And not only can you not make a living, they don't have the time because they have to work so much, to do it as a hobby. Because you really have to push yourself and be in overdrive all the time to even have a hobby making baskets and working.

Throughout the interviews, participants brought up many different ways that capitalist economy negatively affects their communities. Some of those discussed were

the environmentally damaging industries on tribal lands, the amount of poverty and unemployment in their homelands, and the way that the system steals away the time necessary for cultural activities.

The changing climate is creating many different types of challenges for Indigenous communities; however, as with other adversities and challenges there is always resistance, resilience, and people working on finding solutions. In the next section, my interview participants talk about their ideas to alleviate the impact of climate change in Indigenous communities.

### *Solutions*

Nine out of nine participants responded that they believed that human activity is the cause of climate change. One participant responded that they believed that climate change was caused by both human and natural causes. This is important to note because public perceptions of whether climate change and global warming are caused by anthropogenic activity has changed over the past few decades. A recent paper referenced a public opinion poll that demonstrates that in 2017 only 56% of Americans polled believed that the causes of climate change were anthropogenic (Ballew et al. 2019). Public opinion is split among political parties with white middle-aged conservatives being the most likely to deny that climate change is happening or that it is due to human activity (McCright and Dunlap 2011). Seven out of nine interview participants without prompting commented that drastic changes will need to be made in order to slow the impact of climate change. Nine out of nine had ideas and possible solutions to alleviating

the impact of climate change in their communities and beyond. These ideas ranged from living more sustainably and using less fossil fuels, to the United States joining other nations in the Paris Climate Agreement to moving away from a society based on capitalism to one that relies on Indigenous knowledge and emphasizes human relations with other lifeforms.

André Cramblit spoke about the Paris Climate Accord: “well we should sign the Paris accords and be part of that and any global treaties on changing the global climate problem. We should lead the world in trying to decrease our impact on the Earth.”

Dixon Terbasket talked about the importance of protecting the remaining biodiversity.

Well, our biodiversity is changing and slipping away from us so fast that we need to put protections on what's left. Really, what we need to do is start protecting what's left. Taking back some stuff that can be taken back and put back into [place]. For the water especially, take some of those drainage ditches. Take those out that used to be water flow and they put them in to drain the swamp...Try to fix those places where the water was taken out, riparian areas. Put into these ditches so that they could look at some of those on a small scale. I think repair and fence [those areas] to keep the cattle out of the streams. You know? And certain spots where they're having huge impacts on our water flow. Protect the riparian areas and all those. Have a bigger buffer zone for harvesting timber and that stuff. I'd leave the timber in the ground and keep people from growing and selling the land and building houses out on our land. Put our people back. Coral them [settlers] up and put them back into certain zones. Don't allow any more expansion of stuff, right? Take out some of those parking lots revitalize some of the oldest cities. Plant gardens where we should be to have food security for people. They're doing a lot of that better in the States. You know, it's happening slowly in Canada. Yeah, so those are the kinds of things we need to really start looking at. Education. I think education is one of the key components to any further awareness. We need to start educating these old fuckers that don't want to listen. Guilt them or something, I don't know.

In the above quote, Dixon brings up many solutions as to how to make small but impactful changes to alleviate the environmental problems that are occurring in his traditional homelands. This passage demonstrates how much knowledge that he has on

finding solutions. Dixon is a Traditional Knowledge Holder for the Okanagan Nation.

One way that communities and governments can alleviate some of the environmental crises that are occurring, including the issue of climate change, is to call on Indigenous Peoples as leaders in the Climate and Environmental Movement and widely make use of Indigenous knowledge in crafting remediation and mitigation plans.

Another recurring theme that came up when asked about possible solutions to the climate crisis is the importance of young people. PennElys Droz spoke both about the need for people with money and powerful positions to help create a shift to a sustainable economy and about the importance of teaching young people.

Yeah, I mean, I think fundamentally, people with... I'm not talking about like spiritual power, or personal power, or the real meaningful forms of power. But people that have the sort of shallow forms of power in the form of cash money and influence, need to either need to get brave, and get out of their bubbles. Because there is more than enough money in the world, to transition entire industries, just the fossil fuel industry. And their investors and their upholders decided one day that they were going to change their industry and turn into something that was beautiful for the world. And that they were just going to have to bring in, like, the brilliant minds to help them do that, and shift this shift this thing. Like, there, the money is there to do it. And, like, the money is absolutely there to do all of these things. And anytime anybody tells you that, that it's there's not that's, that's bullshit. Because there absolutely is just who, like I've met, really, really, really, really wealthy people. And a lot of them are fearful. And a lot of them were raised by families that totally forgot that the earth is a living being that provides for your life, and they see the earth and her abundance as something to exploit. And that's, and you know, they have a lot of insecurities, fear around changing that mentality, when those are the people that need to, to get brave, and just make a different decision. Like, there, there's actual people, like, there's like, 30 people in the world, that if they decided to make a different decision, like they could, they could shift this thing. So, fast. And yeah, like, culture shift.

So what we're doing here is, my kids are learning how to hunt, my kids are learning how to plant seeds, my kids are learning how to sow seeds my kids are learning how to be strong and not be spoiled, and think that they need, like, all kinds of special types of like, like, you know, if in the future, they don't have access to all of the, you know, snack foods and things, you know, I want them to not feel depressed, and like they're missing something. So, I buy them, the junk, and the snack foods and all that stuff. And then they also have had to learn to eat like a whole lot of like, plain beans and oatmeal. And, you know, just keep them resilient, you know. So that's been, and to and to learn the land, and like the biggest thing that I think that all of us should do, because a lot of Native people as well, like we're in this sort of spiritual cultural revival era, as well. Being able to be so much freer to be ourselves than we have before. And, and I think that one of the biggest, most important things to maintaining traditional knowledge, but also learning new traditional knowledge, because, because of climate change, like a lot of the sort of prescriptive, traditional

knowledge doesn't apply in some places, and so intimately teaching kids and ourselves as adults, how to closely observe with all of your senses, your world.

In these two quotes, PennElys says much about the negative impact of fossil fuels and climate change; however, she also speaks to the possibility of making change and shifting the perspective of people who are able to influence the corporate world to switch to clean energies. She speaks about the importance of teaching children to be resilient and strong. The last few sentences of her quote, PennElys brings up the point that it is important to maintain traditional knowledge and also important to observe the world closely with all our senses and create new knowledge, in order to confront the climate crisis. This listening and observing and walking with respect on the Earth is a sentiment that is ingrained in Indigenous cultures and runs opposite to capitalism's tendency to put profit over the health of the people and the environment...

Robert “Bob” Wilson recently had two of his children travel out of the country for COP25, the 2019 United Nations Climate Change Conference. He also spoke about the importance of listening to young people.

Right, the world can't speak for itself, so it's speaking through our younger people. They are speaking for the water, the birds, the trees. Everything that's living here. So, that's a whole other Indigenous thought and view and thing that we're gathering and doing here. You know that's a big process all on its own. You know, I think, you know, it's going to make a difference.

Indigenous Knowledge Systems are complex and involve many different fields of thought and perception. Ceremonial dances have taken place for thousands of years for very specific reasons and many of these reasons are to heal and maintain balance in the world. Viola Brooks spoke about this aspect of ceremonial dancing in order to heal and maintain the equilibrium of the Earth.

I traditionally do ceremonies, we do our ceremonies to pray for the world. And I think that's something I'd like people to actually know. Jay is like, they're like kind of Roundhouse dancing, your Big-Time dancing. Their ceremonies are different from our ceremonies. but since I've been down here, and with him, I've learned that they do it differently, but also similar...It depends on the ceremony of course. But it's something that all tribes do is pray for the world to be in balance. And that's why I'd say probably one of the biggest issues are, that we are out of balance and that's causing a lot of things to be more difficult in maintaining traditional practices and continuing ceremonies.

Indigenous Peoples are hard at work all over the planet fighting to save the Earth on many different levels and using many different tactics, from re-establishing sustainable communities through food production and green energy grids, to continuing traditional ceremonies and prayer to heal the Earth and the People. In the next section I will extend this discussion how the data shared by my interview participants connects to the theories and literature previously presented in this thesis. I will also provide areas for further research that could empower, enrich, and provide more solutions to the problem of climate change in Indigenous communities.

## FROM SETTLER COLONIALISM TO CAPITALISM

The structures of settler colonialism have impacted Indigenous Peoples in North America since Europeans first stepped foot here and continue to do so in many contemporary ways. Interviews with participants revealed how much the issue of settlers and non-Indigenous people moving onto traditional lands still impacts Indigenous communities in the Pacific Northwest. Without prompting, six out of nine participants brought up how their communities are impacted by settlers. Dixon Terbasket expressed his frustration over the issue of continued immigration of settlers, how it is affecting his community, and how this is related to climate change.

We have way, way, too many people who are not native. But I will go for not a racist term. I'll use settlers or immigrants and there's just way too many in my territory here. We're one of the, I guess, chosen ideal spots in the Okanagan, it's like Southern California. The population is...There are a lot of people here that are just tourists, but more and more people are moving here and the land is getting chopped up...I think it's due to a lot of things...climate [change] might be one of them...because of the population. People are moving away from where this is happening [more]. You're studying a really tough one...It's obvious, it's happening. Yeah, yeah. The animal counts are down. The habitats have been destroyed by logging. The wetlands out there, the mountaintops, they're drying up. We have cattle stomping around in what's left of the little bit of water.

In this one quote, Dixon combines the impact of settlers coming into the traditional lands of his people and buying or building homes. He talks about the land being broken up through this process. He also alludes to the fact that people may be moving into his traditional lands because their former homes are possibly being impacted by climate change. In the last few sentences of this quote, Dixon talks about capitalistic ventures such as logging and cattle ranches, also initiated by settlers, that have created more environmental problems in his community.

Robert “Bob” Wilson also spoke about the impact of settlers on the 1.1 million acre former Klamath Tribes reservation. The vast majority of this land was lost in 1954, when the Klamath Tribes were terminated as a federally recognized tribe. Through litigation against the federal government, the Klamath Tribes demonstrated that they had retained hunting, fishing, and gathering rights on these lands. In 1986, they won another lawsuit and were restored as a federally recognized Tribe.

You know like the waters are low, [the] springtime run offs you know. We don't have enough snowpack...when the water is heading to the lakes. So, not only that but [there's] a bunch of the farmers that are trying to get more water. They're digging their waterways to hold more water and digging them wider so they can take more water out of our rivers...They are changing the waterways. So, in places our vegetation is not hanging on like they did. There are places that are widened out, holding water. So now there's just a little stream running through it.

In the above quote, Bob stresses the impact that farmers have had on Klamath traditional lands. Farms and cattle ranches are an economic venture that settlers brought with them in the nineteenth century, removing the original people and changing the landscape of the Klamath basin. These farmers and ranchers have not stopped diverting the waterways on Klamath traditional lands.

Throughout my interview with Dixon Terbasket, the topic of settlers, environmental damage, and issues related to capitalism came up. In the next quote, he talked about encroaching settlements of non-Native people, competing for game with them, the economy on the reserve, and the problems for animals that come with logging and replanting hybrid trees for fiber on traditional Okanagan land.

Yes, it's so sad like I used to, I could just drive up a little ways or go on the horse and go away with all the meat that I needed. Some time to kill six eight animals to feed my sisters and my friends, the single women, my mother, five houses, right? Yeah, now like I've got to put big effort in. This food used to be reasonably inexpensive, but now it's like you know a tank of gas costs \$110 in the truck. And I have to drive for two hours just to get to a spot where I think there's going to be an animal. but when I get there, there's more samas. And samas the term for white people,



white people are all over the place. So, we just have like wow, we have so much competition for our food now. Because they all see it as healthy and vibrant. They base it on recreation and food harvesting. So yes, that is a big issue. Because as our population grows. The food is no longer there. We have too many cattle with too many people, we have too many logging roads, we have too much cut blocks, the timbers all gone. You know and then they plant all these horticulture highbred trees that are going for fiber in the next 40 to 60 years from now. And it's like, kind of walk through this brush in front of me you can't even hunt. The animals don't even want to go in there. There needs to be some kind of new deer that adapts to the cut blocks. Because it's just so thick. I mean the animals, it's just so unbelievable. I mean the cut blocks. It costs money to go anywhere. And most of the people on the reserve, they don't have money, they don't have work, they don't have a car or truck. And all around the mountains, the settlers are killing the animals and we are competing with all the white guys and white guys are so righteous now. And they have got all the resources because they put us, they lock us in these boxes on the reserves. And yeah, there's all kinds of constraints but you know, people that don't understand their rights. So, economy, getting the fuel to get to some place. So yeah, it's a tough one. So yes, the answer is yes. And it's very difficult and getting more difficult all the time. As far as being able to maintain sustenance and harvesting right, to harvest food. Yeah.

Dixon's quote demonstrates the contemporary impacts that settler colonialism has on Indigenous communities. Indigenous people are still having to give up land to settlers who bring with them different ontological beliefs and ways of living, including in Dixon's case building lakefront homes with expansive lawns and nearby golf courses. In addition to the development, many of these non-Natives have heard of the health benefits of wild game, or are simply looking to inflate their masculinity, and are hunting for wild game. Settlers hunting creates a competitive hunting situation in an already depleted and challenging environment. Often hunting areas are sandwiched between cut timber blocks and a patchwork of communities. Dixon also brought up the economic difficulties that remain in most Indigenous communities. With a shortage of jobs and economic opportunities, many are left without the means to drive to areas where they may be able to hunt for traditional foods.

## RESEARCH CONCLUSIONS AND FUTURE DIRECTIONS

While writing this thesis my purpose was to draw connections between neoliberal capitalism, settler colonialism and the impact of environmental degradation and climate change on members of Indigenous communities and demonstrate how these structures have impacted traditional lifeways and culture. I also sought to unpack the mitigation efforts that have begun and assess whether communities have had to physically move or make drastic changes to their lives because of the impact of climate change in their communities. I believe this thesis demonstrates that climate change and environmental degradation are the result of settler colonialism and neoliberal capitalism.

Using the amazing plethora of knowledge, I was gifted with through interviews with nine Indigenous folks who are culturally active in their communities and by combing through existing literature, much written by Indigenous Peoples, I have woven a story that demonstrates how all of the pieces of this research come together. I believe that this thesis has brought to the surface many ways that climate change is impacting Indigenous communities in the Pacific Northwest and beyond. Drought and fires were certainly the most impacting climate issues in Pacific Northwest Indigenous communities. These two devastating problems are directly related to a system of settler colonialism and capitalism, which emphasizes profit over any other concern. Also, a crucial factor impacting communities are the capitalistic issues of over development and the diversion of water to agricultural and metropolitan areas. This combination of climatic changes and damaging capitalistic ventures such as water diversions and poorly

managed logging have created deadly fire seasons, the likes of which we have not seen before (Nature Geoscience 2019). Indigenous management of these resources using traditional ecological knowledge is a solution that could slow the effects of climate change in the Pacific Northwest. Several interview participants brought up the need to better utilize these solutions. Indigenous management of controlled burns was a solution that came up in multiple interviews in order to both prevent deadly wildfires and to produce healthy materials for continuing cultural traditions such as basketry and ceremonial regalia making.

This research has also brought to light the tribal planning and mitigation efforts that are underway in many tribal communities and how they are working to keep communities as safe as possible and evacuating them successfully when necessary. I also found that Indigenous Knowledge Systems are being used at the micro, meso, and macro level to deal with effects of climate change. These systems of Indigenous and Traditional knowledge are helping to develop strategies of strength, healing, adaptation, and resilience at the individual and family level, the community level and at the international level through networks of Indigenous communities. Efforts are even underway to incorporate this knowledge at the state and federal level (Rinkevich et al. 2011), although the serious incorporation of this knowledge by settler states changes with administrations and needs further work. We are now living in a dangerous time and we need to do everything we can to slow down the warming of the planet. Now is the time to incorporate the traditional ecological knowledge and strength and resilience of Indigenous Peoples into climate solutions. With both traditional ecological knowledge

and our unique legal status, Indigenous Peoples are leading and empowering the Climate Movement. In the final section of this thesis, I will discuss the next steps that can be taken to enhance this research and strengthen its capacity to assist Indigenous communities in mitigating the effects of climate change.

### *Future Research Directions*

The climate crisis is accelerating and so far, world leaders are failing to make necessary changes to slow it down. Because of this, it is important to further this research to include the issues that are and will face Indigenous communities, including the issue of climate displacement and refugees. Several individuals who participated in my research interviews have had to relocate due to climate induced emergencies, such as wildfires and extreme flood events. None; however, would fall under the category of climate refugee. This is due to the fact that they did not have to leave their homes for more than a few weeks. With the increased risks of climate disasters, there is further research needed in long-term strategies for dealing with extended extreme weather events in the Pacific Northwest. One possible mitigation strategy that could be explored is the viability of tribal mobile villages in areas that are often impacted by extreme weather events and disasters. This type of solution for many Indigenous Peoples, would be similar to how the People lived before European contact with a winter and a summer village in areas where food was available and the conditions more ideal.

It is clear that we will undoubtedly be faced with increased climate change impacts and extreme weather events in the coming years and one thing is certain, market-

based solutions such as Reduced Emissions from Deforestation and forest Degradation program, nicknamed REDD or geoengineering solar radiation management (SRM) projects which have been touted as a solution to cooling the planet are likely to only harm Indigenous communities and won't be productive in slowing climate change. Market-based housing buyout programs have also been shown to be culturally biased and ineffective in Indigenous communities. In order to ensure greater equity in disaster response and adaptation efforts, it is evident that instead of using the market-based, racially biased framework that created the crisis, we should be looking at alternative ways to create solutions. Tribal Nations, community based organizations, social scientists, climatologists, environmentalists, and policy makers need to work together to build a framework that doesn't reinforce and increase economic and social disparity. Keeanga-Yamahtta Taylor said it well in *How We Get Free: Black Feminism and the Combahee River Collective*, "those whom capitalism materially benefits are decidedly small in number, while those with mutual interest in creating a society based on human need are broad and expansive," (Taylor 2017:12). Environmental disaster and crisis response based on capitalist ideologies have failed those most in need. I believe the only way we will be able to create greater equality will be to use a non-capitalistic climate crisis response methodology grounded in collectivity and community.

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## APPENDIX

### Interview Questions

#### I. Traditional Subsistence Patterns

1. In recent years, have you or your family hunted, fished, gathered traditional foods, or sustained yourself through traditional agricultural methods?
2. Have you noticed changes over the past few decades in the amount of food you have been able to sustain yourself and your family with, by traditional methods?
3. Do you or your family gather traditional materials for cultural reasons? e.g. Basketry, medicine, other traditional/cultural reasons?
4. Have you noticed changes in the amount of food or materials that you have been able to gather in the past few decades?
5. Have you had to go to different areas in order to find the food or materials that you or your family traditionally hunt or gather?
6. Have you had to make any other changes in your cultural patterns, due to environmental challenges, or changes in the seasons?

#### II. Economic Security

1. Has your ability to make a living been affected by environmental issues, or changes in weather patterns? e.g. Tourism industry, forestry, natural resources, etc.

### III. Natural Environment

1. Have you seen changes to your community and environment, due to changing weather patterns, or environmental issues, over the past few decades? Fi
2. Are you affected by flooding or drought?
3. Is erosion of land, due to weather or water, an issue for your community?
4. Have you seen changes in water sources?
5. Have you been affected by extreme temperatures?
6. Have you been affected by wildfires?
7. Have you seen changes to seasons?
8. Have you had to relocate temporarily or permanently, due to natural disasters?

### IV. Personal Health Impacts

1. Has your water supply been impacted from changes in amounts or contaminated by pollutants or algae? Has this caused any health issues for you?
2. Has your health been affected by smoke caused by wildfires?
3. Have you had to change your diet due to traditional foods (or traditional agricultural foods) not being available?
4. Have you or your family seen changes in allergies over the past few decades? e.g. Seasonal allergies, due to increased, or decreased pollen counts?
5. Is Hantavirus an issue for your community? Has this been an issue in the past?
6. Is your community affected by West Nile Virus? Have you seen increases or decreases in the mosquito, or no-see-um populations?

7. Is Lyme's disease an issue for your community? Have you seen increases or decreases, in cases of this disease?

#### V. Government Efforts

1. Do you know if your local government has a disaster plan?
2. Do you know if your local government took steps to prepare for changes to the environment, due to extreme changes in weather patterns?
3. Do you know whether the State or Federal Government assisted your community with planning/preparing for environmental issues or disasters, due to changes in weather patterns or natural disasters?
4. Do you know if your community has a disaster plan that includes evacuation or relocation plans in the event of a natural disaster, such as fire, or flooding?
5. If your community is forced to relocate due to a natural disaster, or the effects of extreme weather, due to climate change, how do you think this will affect your community's traditional and cultural lifeways?

#### VI. Solutions

1. Do you think that the warming of the earth and increasing weather related disasters are naturally occurring, or due to human activity?
2. Do you think the local, state, and federal government is doing enough to address the problem of climate change?
3. What, if anything, do you think should be done to combat the effects of climate change?

4. Are you aware of the Indigenous led protests in other parts of the United States, Canada, and South America to stop oil and gas drilling and pipelines, and logging that is contributing to climate change?
5. Is there anything else about these changes in weather and the environment, that you would like to talk about?