

“It is always about land”: Co-management as a pathway to homelands access for  
California Native Tribes

By

DYLAN MOORE  
THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

Community Development

in the

OFFICE OF GRADUATE STUDIES

of the

UNIVERSITY OF CALIFORNIA

DAVIS

Approved:

---

Beth Rose Middleton, Chair

---

Gayle Totton

---

Clare Cannon

---

Jonathan London

Committee in Charge

2023

## **Acknowledgements**

I could write an entire thesis on the gratitude I feel for the people who made this research possible. I am immensely grateful to the Indigenous women and people who have shared their wisdom and time with me. The landscape which I feel so tied to is only in existence because of the stewardship of Indigenous people and for that I can never say thank you enough. To my grandmother and grandfather, your endless love for learning is embedded in my DNA and I hope that my work will make you proud.

I am also indebted to the personal and professional support I have received from my mentors. Dr.'s Beth Rose Middleton, Jonathan London, Clare Cannon, and Mark Cooper have all provided immense support to me during this degree program. Lindsay Dailey and Gayle Totton have shared their time and guidance with me in ways that have immeasurably shaped my learning and for which I am truly grateful. Lastly, I would like to say thank you to my friends and community in the UC Davis Geography, Community Development, and Ecology programs. Thank you to all of those who have shared this journey with me, and I look forward to the many more points of connection we will have in my future endeavors.

## **Abstract**

This project evaluates the existing literature on Tribal co-management regimes for their success in enabling Indigenous sovereignty and homelands management in the United States and Canada. Developed to inform policy makers and Tribal leaders on co-management frameworks, this systematized thematic literature review analyzes both the practical components of co-management regimes, as well as the intrinsic components which impact their effectiveness. Informed by the anti-colonial praxis of Indigenous Political Ecology, 27 case studies were analyzed according to six metrics of Tribal co-management success: 1) recognition of Tribes as sovereign governments, 2) incorporation of US Trust responsibilities, 3) the existence of structures to enable Tribal involvement, 4) early integration of Tribal management, 5) extensive recognition and incorporation of Tribal expertise, and 6) the effectiveness of conflict resolution processes. Analysis of the case studies showed mixed-results in which co-management regimes produced some benefits but not without caveats and nuance. When executed thoughtfully, co-management can increase Tribal involvement in land management regimes; however it does not result in decolonization. Instead, co-management should be viewed as a possible pathway towards increasing the capacity and political power of Tribes to engage in true decoloniality.

## TABLE OF CONTENTS:

INTRODUCTION:.....	1
<i>Pathway to Research</i> .....	1
<i>Summary of Approach</i> .....	2
<i>Native History and Settler Colonialism in North America</i> .....	4
<i>Settler colonialism in California</i> .....	7
<i>20<sup>th</sup> and 21<sup>st</sup> Century Tribal Affairs Legislation</i> .....	9
<i>Settler Colonialism Theory and Concepts</i> .....	10
<i>Contemporary Land Management Policies in California</i> .....	13
<i>Towards Normative Co-management</i> .....	17
CHAPTER 1: CO-MANAGEMENT, THEORY AND ASSESSMENT .....	19
<i>Defining Co-Management</i> .....	19
<i>Development of Co-Management Formats</i> .....	22
<i>Critiques of Co-Management</i> .....	28
<i>Situating Co-management in Theory</i> .....	31
CHAPTER 2: POSITIONALITY, RESEARCH DESIGN, AND METHODOLOGY .....	34
<i>Positionality Statement</i> .....	34
<i>Analysis Framework</i> .....	34
<i>Thematic Literature Review</i> .....	36
<i>Data Collection: Inclusion Criteria</i> .....	37
<i>Data Collection: Search Strategy</i> .....	39
<i>Data Collection: Synthesis and Analysis</i> .....	40
CHAPTER 3: RESULTS.....	42
<i>Summary Data</i> .....	42
<i>Table 3: Categorical descriptions of co-management frameworks reviewed</i> .....	45
<i>Summary of Findings</i> .....	45
<i>Respect for Sovereignty</i> .....	49
<i>Trust Responsibilities</i> .....	50
<i>Conflict Resolution</i> .....	50
<i>Timing of Tribal Involvement</i> .....	52
<i>Integration of Tribal Expertise</i> .....	53
<i>Structure for Tribal Involvement</i> .....	54
CHAPTER 4: DISCUSSION .....	57
<i>Limitations of this research</i> .....	58
<i>Implications for Land Management Policy</i> .....	59
<i>Implications for Decoloniality</i> .....	61
CONCLUSION:.....	64
<i>A closing reflection on land</i> .....	65
LITERATURE CITED .....	67

## **INTRODUCTION:**

### *Pathway to Research*

Every February for nearly a decade, a small but steadily growing group of people gather in a field just outside the town of Mariposa, California for a workshop on cultural fire. The group is composed of students, academics, representatives from the US Forest Service, the California Department of Natural Resources, the California Department of Forestry and Fire Protection, and, most crucially, Indigenous leaders and their families. Over the span of the three-day workshop, participants have the chance to learn directly from Tribal Elders about the relationship between Native people and fire.

Much of this learning happens around fire pits or in sitting with Native basketweavers, whose knowledge of fire is a key piece of what has allowed their practice to continue for millennia. During my first trip to the workshop, I sat next to a Mono elder and basketweaver and listened as she shared her concerns about the threats to basketry and cultural fire. Anyone who has ever shared space with a basketweaver will know that it is no accident that these women are so deeply connected to fire. Her passion was igniting and the tone and energy in her voice ebbed and flowed like the flames we sat watching. At one point, her voice mellowed to nearly a whisper, but the tone increased in urgency, she leaned in towards me and said “what we need for our people, is access to land. It is always about land.”

It struck me that in this moment we were surrounded by people whose organizations collectively represented millions of acres of land. For most of this land, the restrictions on Native access were the result of political, logistical, and bureaucratic challenges; things which could certainly be addressed if land managers and policy

leaders had the will to do so and institutional support to do so. Unfortunately, my experience working as an employee with various public land agencies in the US, makes me acutely aware of the political, bureaucratic, and logistical complications that plague the unwillingness of land management agencies to increase this access. So, informed by my own experiences with land, and with the words of the basketweaver as my guide, I come to the study of co-management to uncover its usefulness as a remedy to the problem of land access.

### *Summary of Approach*

In September 2020, California Governor Gavin Newsom issued Executive Order N-15-19, which apologized to California Native Americans for the violence committed against them on behalf of the State (*Exec. Order No.N-15-19*, 2019). The Order also established a Truth and Healing Council to fund and guide corrections to the State's historical record and identify pathways towards remediation of injustices against Native people (*Exec. Order No.N-15-19*, 2019). Nested within the press release for N-15-19 was a commitment from the administration to move beyond the standard consultation requirements between State agencies and Tribal governments to an improved process that prioritizes Tribal management and co-management are prioritized (Office of the California Governor, 2020). The press release does not provide a specific definition of co-management, and this paper will address the complexities of creating a cohesive definition. Of the numerous definitions offered in the co-management literature, each indicate some degree of power-sharing between public agencies and Indigenous peoples. In the three years following the Governor's press release, significant strides have been made toward increasing the role of Tribal Nations and organizations in managing State

and federally-owned Tribal homelands. While these advances are important, they are only one component of addressing a violent history of land dispossession and only one step in the process of seeking justice.

There is a significant amount of literature that addresses the role and efficacy of co-management as a pathway to justice for Native peoples. A thorough review of this literature is important for informing the efforts of Tribes and state agencies in creating effective co-management partnerships. There are numerous case studies of co-management which illustrate the various frameworks for its implementation and their effectiveness within the specific context of those cases. However, there is a need for a comprehensive analysis of what these cases tell us about co-management and what lessons can be learned in order to improve its implementation. The research presented in this thesis uses a systematized thematic literature review methodology to synthesize and analyze the literature on Tribal co-management in the United States and Canada. Specifically, this study will examine how effective these co-management efforts have been in increasing Tribal self-determination, access to land, and participation in land management regimes.

This paper will begin by providing historical and theoretical context for the importance of co-management within the United States and Canada. The history and theoretical underpinnings of settler colonialism, particularly within the United States, will be explored. An extensive review of co-management theory and existing literature, for both tribal and non-tribal comanagement, will be provided before the actual thematic analysis will be described.

## *Native History and Settler Colonialism in North America*

To understand the importance of movement towards co-management, it is important to first understand the context in which relationships between Tribes and government entities are situated. While the impetus for this research is the recent surge in government efforts to engage in co-management within California, the data include case studies from across the United States and Canada. Therefore, an overview of the impacts of settler colonialism on Native peoples is provided across both countries with special attention paid to Native history and settler colonialism within California.

Understanding the history of the United States and Canada is to understand the history of settler colonial intrusion into the North American continent. While the purpose of this study is to inform policy within the United States, Canada is included in the analysis because of its shared history of settler colonial mechanisms and significant overlap in Tribal homelands. Both US and Canadian relationships to Tribes were heavily informed by the Royal Proclamation of 1763. Signed by King George, the proclamation confirmed the right of Indigenous people to sovereignty and self-determination (Dunbar-Ortiz, 2014; Mills & Nie, 2020). A majority of treaties within the US and Canada were developed through the frameworks set up by this proclamation. Given that these treaties form the basis of many contemporary laws, policies, and intergovernmental relationships with Tribes, an analysis that borrows from both geographic locations provides a richer evaluation of the co-management landscape in a North American settler government.

As articulated by Dr. Katilin Reed (2020), “the business of making America was the business of Indian killing.” This nation building occurred through a series of



treaties, wars, epidemics, and discriminatory policies. For the purposes of this paper, I will describe this history primarily through a reflection on the policies which most significantly shaped the relationships between the Canadian, United States, and California governments and the Tribes with which they engaged. Additionally, I will provide an overview of the theoretical and conceptual underpinnings of the settler colonial project.

Beginning with the 1778 Treaty With the Delawares, the United States government has entered into roughly 400 treaties with Tribes across the US (Lillian Goldman Law Library, 2008). The constitutional mechanism for treaty making in the US is enshrined in Articles I and II of the constitution which permits the President to enter into treaties with foreign and Tribal governments on behalf of the United States, providing that the Senate ratifies the agreements with a two-thirds majority (Dunbar-Ortiz, 2014; USL Law Library, n.d.). By signing onto these treaties, the US government agreed to uphold trust obligations to protect rights, lands, assets, and resources granted to Tribes through the treaties (Long & Lake, 2018; Mills & Nie, 2020; Nie, 2023; Ryan, 2015; Vinyeta & Lynn, 2015).

Despite the promise of these treaties, the ability of Tribes to live out the right to self-determination remains unrealized. The exact timeline of settler colonial disruption to the North American continent is a point of contestation (Ostler & Shoemaker, 2019). Attempts at eliminating Native people from the region occurred for nearly 200 years before the United States was officially established as an independent nation (Dunbar-Ortiz, 2014). By the late 1800's the US government had formalized policies and practices of elimination through instances such as the Seminole Wars (the second of which was

the longest foreign war in US history until the Vietnam War), the Trail of Tears (Dunbar-Ortiz, 2014), and the dispossession of huge swaths of Native lands through the Dawes and Homestead Acts (Bacon, 2019; Glenn, 2015; Goldstein, 2018; Wolfe, 2006).

The Dawes Act, also known as Allotment, divided Tribal land from cohesive reservations into plots of land, or allotments, that were owned by individual people (Glenn, 2015). This process was specifically designed to disintegrate remaining Tribal lands and make it easier for plots to be sold to white settlers (Mills & Nie, 2020; Wolfe, 2006). Similarly, the Homestead Act was designed to encourage westward migration by designating Native-lands not yet colonized as reserved for “productive use”, such as settler agriculture, regardless of the presence of Native people (Goldstein, 2018; Norgaard, 2019; Witgen, 2019).

These acts are just two examples of the many ways that land was occupied and stolen from Native people. By the early 20<sup>th</sup> century, control of land that was not privately owned by settlers was brought under the purview of the U.S. Forest Service, Bureau of Land Management, and National Park Service (Long & Lake, 2018). The early use of public land agencies as tools for settler control and oppression of Native people set the precedent for contemporary relationships between Tribes and land agencies.

For example, the original 1855 treaty between the Blackfeet Tribe and the US government specifically granted the Tribe the right to hunt on public lands (Ashby, 1985; Spence, 2000). However, when Glacier National Park was established in 1910, the US argued that once the land became a national park, it ceased to be “public land” and thus the right to hunt was up for renegotiation by Congress (Ashby, 1985; Spence, 2000). The distinction between parks and “public lands” in this case is intentionally

vague. However, the implication in the case is that park lands are public only in that they are preserved for enjoyment by the broader public, as opposed to a public land in which their ownership and control is available for negotiation between the federal government and Tribes. In addition to preventing Blackfeet from hunting within National Park lands, the Park itself continued to expand its territory into existing reservations. The designation of the National Park, the restriction on hunting, and the extension of park lands was all done under the guise of preserving game population and conserving scenic landscapes (Spence, 2000).

### *Settler colonialism in California*

The US colonization of California created a challenge for the typical approach to Native displacement. Previously, as the eastern portions of the continent were colonized, Native people who were not killed were instead moved into reservation and allotment lands further west (Anderson, 2005). With the settlement of the West, there was nowhere left to displace people (Anderson, 2005). This led to what Kari Norgaard (2019) referred to as the “apex of genocide” in California. By the end of the 19<sup>th</sup> century, the Native population in California had declined by up to 90% (Berkey et al., 2021; Reed, 2020).

This decimation was no accident. It was the official policy of the state of California to engage in extermination practices against Native people (Anderson, 2005). This war of extermination was waged through internment (Walker, 2014), combat (Norton, 1979), ecological destruction (Anderson, 1999), land dispossession (Berkey et al., 2021), as well as the criminalization of Native culture and existence (Norton, 1979). The Infamous 1850 Act for the Governance and Protection of Indians was one of the key

policy mechanisms through which Native oppression and elimination occurred (Johnston-Dodds, 2002; Norton, 2014). The law created a process through which Native people could be forced into servitude or removed from their lands at the request of white settlers (Johnston-Dodds, 2002; Norton, 2014). As a result of the law, 10,000 Native people were indentured, a significant portion of whom were Native children (Johnston-Dodds, 2002; Norton, 2014).

Criminalization of Native people and their cultural and material practices was especially prominent in land management policies. As noted above, the USFS and other public land management agencies had a highly militarized approach to impeding Native access to land (Norgaard, 2019; Vinyeta, 2021). This manifested in the form of criminalization of key Native land management practices such as cultural burning (Anderson, 1999; Vinyeta, 2021). The USFS also coordinated with the Indian Services Agency (ISA, the government entity responsible for coordinating commerce with Native people) to help push Native people onto allotment land in exchange for the ISA's assistance with preventing cultural burning on forest lands (Anderson, 2005). The irony of these policies is that Native management practices, like cultural burning, are hugely responsible for the park like beauty described by settlers and which was motivation for intense conservation in the first place (Anderson, 2005; Anderson, 1999; Goode et al., 2018; Long & Lake, 2018; Norgaard, 2019; Vinyeta, 2021).

The loss of Native people's ability to engage in traditional land management and land-based ceremonies was especially detrimental given the uniquely duplicitous way in which Tribes were dispossessed of land in California. Along with prohibitions on accessing government owned land, many Tribes in California did not receive any

allotment or reservation territories (Berkey et al., 2021; Reed, 2020). In 1852 the US government negotiated 18 treaties with Tribes across California (Reed, 2020). However, when the treaties were sent for ratification in the US Senate, the California State legislature secretly pressured the Senate not to ratify the treaties (Berkey et al., 2021; Reed, 2020; Vinyeta, 2021). Tribes were never informed that these treaties were not ratified and, in the years following, they lost most control of the nearly 8.5 million acres of land they would have retained (Berkey et al., 2021). Today, Tribes control only 450,000 acres of land across California, just 1% of the states total landmass (Berkey et al., 2021).

### *20<sup>th</sup> and 21<sup>st</sup> Century Tribal Affairs Legislation*

The mid-to-late 20<sup>th</sup> century ushered in a new era of Tribal affairs in the US. The 1934 Indian Reorganization Act ended the allotment era and created a pathway through which Tribes could begin to reacquire federally held trust lands (Berkey et al., 2021). A generation later, in the 1970s a number of significant policies were passed. Perhaps none were more significant for the development of future co-management agreements than the Indian Self Determination and Education Assistance Act of 1974 (ISDEAA) (Donoghue et al., 2010; Washburn, 2022). This act authorized Tribes to administer certain federal benefits programs, as well as programs which concerned land of special cultural significance (Berkey et al., 2021; Donoghue et al., 2010; Mills & Nie, 2022). Numerous amendments to the ISDEAA have occurred since its passage, including the 1994 Tribal Self-Governance Act which allowed Tribes to petition for funding to implement ISDEAA programs and increased the range of programs available for Tribal management (Day, 2014; Washburn, 2022).

Following the passage of the ISDEAA, the 1977 supreme court case *US v Washington* gave birth to what is known as the Boldt Decision (Dolan & Middleton, 2011). The Boldt Decision upheld the treaty rights reserved to numerous Tribes in Washington State to access traditional fishing and hunting grounds now under State control (Cantzler & Huynh, 2016; Dolan & Middleton, 2011). The Boldt Decision is widely credited with laying the groundwork for modern co-management regimes between Tribes and land management agencies (Nie, 2023).

Much of the existing literature on co-management in the North American context comes from Canada, where co-management has been a formal environmental policy process for decades, beginning roughly with the first Comprehensive Land Claims Agreement in 1973 (Cadman et al., 2022). The Canadian government has undergone a series of legislative efforts to strengthen relationships with Indigenous peoples (Youdelis et al., 2021). The Comprehensive Land Claims Agreement system is a form of treaty making that allows for power sharing between Indigenous people and Canadian government agencies in the development and implementation of land management regimes (Cadman et al., 2022).

### *Settler Colonialism Theory and Concepts*

The histories described above combine to make more than a timeline of past events. Rather, they are a manifestation of a deeper project of settler colonialism which is still ongoing (Reed, 2020). The project of settler colonialism is often described through common themes of its temporal, spatial, and political attributes. Patrick Wolfe (2006), in his now famous essay, defines settler colonialism by what he refers to as “the logic of elimination.” This logic is premised on securing, obtaining, and maintaining of

territory which, according to Wolfe, requires the elimination of the owners and inhabitants of that territory. This elimination happens through both the physical violence committed against Native people as well as the social violence of cultural erasure. This logic of elimination operates to secure settler possession of land territories, which Wolfe explains as the “specific irreducible element” of settler colonialism (2006). In this way, Wolfe (2006) explains, contests for land are contests for life. The importance of this sentiment and the spiritual connection between Native people and their homelands will be further explored in Chapter 1, in which I discuss Indigenous Political Ecology.

The importance of land dispossession in the settler colonial project is central to most discussions of its impacts on the spiritual and physical welfare of Indigenous people. Numerous scholars describe the specific impacts of colonization on Native people as a form of eco-social disruption (Bacon, 2019; Baldy, 2013; Brock et al., 2020; Norgaard, 2019). Because of the uniquely intimate relationship that Native people have with their homelands, degradation committed on the land is also degradation of the culture and welfare of its traditional stewards. This degradation was at times willful and intentional on the part of the settlers, such as the destruction of Bison herds as a way to starve and economically choke out Native people in the plains (Bacon, 2019; Dunbar-Ortiz, 2014). At other times, land degradation was a casualty of colonial notions of production which emphasized mining and grazing agriculture as vital land uses at the expense of nearby waterways and landscapes. In California, the impact of mining was especially harmful to the Karuk and Yurok people in the Klamath River valley (Norgaard, 2019). Klamath area Tribes have a deep connection to salmon and their

cultural identity is tied to their lives as fishers (Norgaard, 2019). The current salmon population is roughly 4% of its historic levels, deeply limiting the Tribes' abilities to engage in traditional subsistence and cultural practices (Norgaard, 2019).

Ecological damage leads to what Risling Baldy (2013) terms bio-cultural sovereignty interruption and occurs through a process described by Whyte (2018) as vicious sedimentation. Where bio-cultural sovereignty is the unimpeded ability to practice land-based traditions, its interruption occurs when these traditions and the land they are connected to become unavailable to Indigenous people. Vicious sedimentation enables this interruption through the encroachment of settler ecologies which result in compounding environmental changes that ultimately erase Indigenous ecologies from the landscape and further perpetuates settler ignorance of traditional practices (Whyte, 2018). The lands to which Tribes have been relegated in the US are typically less "desirable" by settler productivity standards and surveys of these lands show an heightened risk of degradation and climate change impacts (Farrell et al., 2021). Because Indigenous cultures are intertwined with the space, place, and memory of the landscape, erasing access to these things through vicious sedimentation, land degradation, and land dispossession is key to the colonial project of Indigenous erasure and genocide (Baldy, 2013; Reed, 2020).

The ontologies that undergird settler colonialism materialize in specific legal doctrines and mythologies. Most relevant to North America and California are the Doctrine of Discovery and *terra nullis*. The Doctrine of Discovery dates back to the 15<sup>th</sup> century Papal declaration that Catholics possessed a divine right to conquest of land (Miller et al., 2010). As this doctrine evolved over the centuries, its application



eventually included all European nations as having special privileges to discovery and occupancy of land (Greer, 2019). While this doctrine began and evolved through European nations, its use transferred to the United States as a legacy of British colonialism. The doctrine was eventually used by the US Supreme Court in 1823 in *Johnson v. McIntosh* as a justification for dispossession of Native lands (Miller et al., 2010). This decision prevented Native Americans from selling or transferring their land to individuals. The basis for this decision was the belief that the United States government was the sole arbiter of land sales on the continent by virtue of having discovered “uninhabited land” (Miller et al., 2010).

These foundational myths of settler colonialism build upon one another. The Doctrine of Discovery is reliant on the idea of *terra nullis*, which sees land inhabited by Native Americans as being entirely unoccupied (Vinyeta, 2021). *Terra nullis* emerges frequently in early public lands policy. While the existence of Native people on these lands was rarely ever denied, that existence did not, according to settler colonial ideologies and US law, constitute a right to ownership of the land (Glenn, 2015). For example, in what is now Yellowstone National Park, early surveyors made note of evidence of burning practices, hunting camps, and gathering sites and still deemed the area as “unoccupied public land” (Spence, 2000).

### *Contemporary Land Management Policies in California*

Despite colonial attempts to commit genocide against Native people across California and the continent, there are currently 109 federally recognized Tribes, 81 Tribes seeking federal recognition, and 56 additional Tribes recognized by the state as “Tribal governments” (Berkey et al., 2021). There are many more Tribes which either

remain unrecognized or are in the midst of petitioning for federal recognition. Many of these Tribes are engaged in innovative and intensive land management and advocacy work. In the Klamath area, Tribal governments employ significant numbers of people in environmental management industries that rival the presence of federal government agencies in the area (Wilkinson & Sahara, 2022). Also in Northern California, the Intertribal Sinkyone Wilderness Council formed the first intertribal Native American land conservation organization in the United States and through their work with the Coastal Conservancy, The Nature Conservancy, and Save the Redwoods League has acquired 4,531 acres of land for Native stewardship (Risling Baldy, 2013; Intertribal Sinkyone Wilderness Council, 2021; Middleton, 2011).

In addition to the lands that are directly owned or managed by Native people in California, the state is also home to a number of partnerships between public land agencies and Tribes. The Quiroste Valley Cultural Preserve in the Santa Cruz Mountains is a partnership between the Amah Mutsun Tribal Band (an unrecognized Ohlone Tribe), the University of California, and California State Parks (Lopez, 2013). The management process at the Preserve has allowed for substantial research and Tribal stewardship opportunities that help develop western scientific evidence for the ecological history and tending that Native people have known and used since time immemorial (Lightfoot et al., 2013). In urban settings, cities such as San Francisco are partnering with Tribes develop Cultural Districts that enable partnerships for the preservation, representation, and stewardship of traditional people and practices (Beam, 2022). The American Indian Cultural District, a first of its kind in the State, has allowed Native groups throughout San Francisco to collaborate on advocacy projects

such as the integration of Traditional Ecological Knowledge (TEK) in California's Climate Action Plan (Beam, 2022).

Where Tribes do not have direct authority over land management decisions, various entities within State and Federal government in California are working to increase collaboration and opportunities for Tribal engagement. Some agencies allow for limited gathering of culturally relevant plant species, such as beargrass in Six Rivers, Shasta-Trinity, and Plumas National Forests (Anderson, 2005). The California Public Utility Commission adopted a policy in 2011 which allowed Tribes the right of first refusal to purchase lands being sold by public utilities under the Commission's jurisdiction (Dolan & Middleton, 2011)

Much of this collaboration occurs under the direction of executive orders such as California Governor Jerry Brown's 2011 Executive Order B-10-11,77 which required all state agencies to engage in government-to-government consultation with Tribes, including Tribes which are not federally recognized but which sit on the California Native American Heritage Commissions list of known Tribes (Dolan & Middleton, 2011). Federally, consultation was required as a result of President Bill Clinton's 1996 Executive Order 13007 and the National Indian Forest Resources Management Act of 1990 (Donoghue et al., 2010; Mills & Nie, 2022).

The US Environmental Protection Agency was the first agency to develop its own policy for Tribal engagement in the aftermath of the ISDEAA (Phelan Hand, 2023). The EPA's policy allowed for Tribes to be designated under Treatment in the Same Manner as a State (TAS) status (Dolan & Middleton, 2011; Whyte, 2011). This allowed Tribes to engage in regulatory authority to define and enforce environmental regulations such as

water quality standards within reservation boundaries, something which they did not previously have the authority to do (Dolan & Middleton, 2011; Phelan Hand, 2023). Policies such as the EPA's TAS stand in stark contrast to government programs like the Integrated Regional Water Management (IRWM) system in California. The IRWM is a significant piece of legislation that created systems whereby substantial policy decisions on regional water management are made and enforced (Dolan & Middleton, 2011). Despite the significance of decisions afforded to IRWM Boards, the original legislation creating the system omitted Tribes as legal participants (Dolan & Middleton, 2011)

Examples like the IRWM illustrate that in spite of the rare instances of agency willingness to engage Tribes in homeland stewardship, that willingness is not a given. As noted by Mills and Nie (2020), even the best written consultation policies will often fall short of truly meaningful engagement. For many agencies, it is a process required to check the box of implementing new projects and, for others, it is an explicit impediment to their desire for full control of the land management process (Mills & Nie, 2022). The G-O Road, which connects the communities of Gasquet and Orleans near the Six Rivers National Forest, is one well-known instance of the USFS demonstrating blatant disregard for Tribal concerns. While this example technically predates official consultation laws, it represents the attitude with which much of public lands were managed in the 20<sup>th</sup> century. The GO Road was built without the knowledge or consultation of nearby Tribes, despite the area being of high importance for Tribal ceremonies (Emenhiser, 2005; Wilkinson & Sahara, 2022). When the road was discovered by a Native gatherer, the ensuing conflict resulted in extensive legal actions in an effort to cancel further development of the road (Wilkinson & Sahara, 2022).

## *Towards Normative Co-management*

With the pressures of entities like Governor Newsom's Truth and Healing Council or Canada's Indigenous Circle of Experts (ICE), which advises the government on how certain public lands can contribute to biodiversity, conservation, and reconciliation with Indigenous groups (Youdelis et al., 2021), agencies across North America are looking for ways to increase the quality and extent of engagement with Indigenous people.

Federally, action plans and reports such as the *Strengthening the Federal-Tribal Relationship: A Report on Monitoring Consultation under the Northwest Forest Plan* (Vinyeta & Lynn, 2015) or the Secretary of the Interior's Order No. 3342 (Berkey et al., 2021) which encourages partnerships between Tribes and the Department of the Interior, outline the pathways through which these agencies see increased Tribal engagement as possible. Other action plans such as the *Strengthening Tribal Consultations and Nation-to-Nation Relationships: A USDA Forest Service Action Plan* (US Department of Agriculture, 2023), offer a more toothless approach to increasing engagement with Indigenous people by simply committing to honoring policies and legislation which are already in place, such as....

Alternatively, the 2016 Secretary of the Interior's Order No. 3342 specifically directs Interior departments to identify opportunities for collaborative partnerships and cooperative management with Tribes (Berkey et al., 2021). Governor Newsom's announcement in 2022 that the state would allocate \$100 million for Tribal involvement and leadership in land management and stewardship is another example of an explicit commitment from the government to meaningful engage with Tribes (Beam, 2022).

Whether these commitments result in truly meaningful engagement is a topic which this paper both attempts to address and calls to be further investigated.

Still, there is no current legal mandate in California that requires public agencies to engage with Tribes beyond consultation (Mills & Nie, 2020). An analysis by Berkey in 2021 revealed only a single co-management agreement between the State of California and a Tribal Nation. In 2022, two bills were introduced in the US House of Representatives to increase protection for Indigenous homelands and update federal land management procedures (US House of Representatives, 2022). The two bills, The Advancing Tribal Parity on Public Land Act and the Tribal Cultural Areas Protection Act, are still pending. Until formal legislation both permitting and requiring meaningful engagement with Tribes is passed, insufficient engagement will likely remain the norm.

While co-management is by no means a panacea for restoring disrupted relationships and ceasing the process of vicious sedimentation enabled by public land agencies, it is one tool that may be deployed in resistance to settler colonial injustices. Successful co-management is often viewed and researched from the perspective of public land agencies, with most research focusing on legal, bureaucratic, and policy mechanisms through which co-management can be facilitated. This research attempts to fill a gap in the literature on co-management by centering the perspectives of Tribes and Indigenous groups. Specifically, this paper will examine how these groups have wielded their influence in order to move the needle of land management from one in which public land agencies share no or very little power with Tribal Nations and organizations, to one in which truly collaborative land management is unfolding.

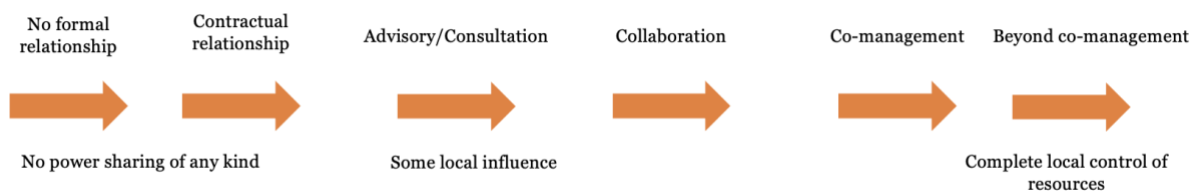
## **CHAPTER 1: CO-MANAGEMENT, THEORY AND ASSESSMENT**

### *Defining Co-Management*

While there is no widely agreed-upon definition of co-management (Berkes, 2009), it is often framed as a formal partnership in which power over land management decisions is shared between a governing agency and local user groups (Berkes, 2009; Castro & Nielsen, 2001; Houde, 2007; Jentoft et al., 1998; Mills & Nie, 2020). Variations in this definition depend upon the context in which co-management is being developed and utilized. Most definitions focus on the links between governing bodies which make up the structure and the processes through which management decisions are made (Berkes, 2009; Cox et al., 2010). Other variations in definition include emphases on the right to regulate resource use (Cronkleton et al., 2012) the right to define desired outcomes in management (Jentoft et al., 1998), the point at which user groups become involved in management (i.e. planning or implementation) (Sen & Nielsen, 1996), and the role of co-management in building institutions and social capital (Berkes, 2009).

The complexities of defining co-management stem from both its interdisciplinary nature and the way in which its conceptual development occurred (Jentoft et al., 1998; Plummer & Fitzgibbon, 2004). Because co-management was conceptualized by describing a series of applied situations, rather than defined through a specific theoretical lens (Jentoft et al., 1998; Plummer & Fennell, 2007; Spaeder, 2005) it has remained a contested topic to define and analyze (Tipa & Welch, 2006). It is often described as a spectrum (Pomeroy, 1995; Tipa & Welch, 2006) with lesser iterations of co-management operating as a consultation process and the strongest iterations

consisting of total equality in decision making power between involved entities (Notzke, 1999; Sen & Nielsen, 1996). This spectrum is demonstrated in *Figure 1* below. However, even this spectrum is debated as many scholars and resource users dispute whether lower-involvement frameworks, such as consultation, qualify as co-management (Berkes, 2009; Tipa & Welch, 2006), if co-management is truly the farthest end of the spectrum or if total community/user group control should be the end of goal of resource governance (Sen & Nielsen, 1996).



*Figure 1: Spectrum of power sharing relationships which define co-management*

In addition to the challenges of defining the spectrum of co-management, understanding the larger implications of this spectrum is important for situating the role of co-management within a decolonial context. If, as many advocates for co-management claim, co-management results in true power sharing then how does this new power balance impact efforts to reject settler colonial governance. Given that settler colonialism is predicated on the removal, subjugation, and erasure of Indigenous inhabitants, then a process of reinstating, empowering, and healing Indigenous relationships *should* be a remedy for current settler constructs. Essentially, if co-management is a spectrum, as co-management agreements move towards greater power sharing do they then also move towards decolonization? This question will be explored



through the lens of Indigenous Political Ecology and the application of Mills and Nie's (2020) metrics for the success of tribal co-management regimes.

In seeking a clear definition of what co-management *is*, it is also helpful to identify what co-management *is not*. Co-management is not contracting out pre-determined workplans to user groups, although contracts can be a bureaucratic tool for allocating authority to a user group. While it can be adaptive, co-management is not synonymous with adaptive management, which refers specifically to the process through which resource managers adjust their approach to changing situations. For example, this can include a single agency making unilateral decisions about how to respond to a high flood year. Lastly, it is not the purchasing of or distribution of ownership of a landscape to user groups. This may be the ideal goal for the decentralization of resource management, but for the purposes of understanding how public land agencies and Tribal entities can coordinate to increase integration of Tribal perspectives, priorities, and values, it is important to look at cases in which ownership was not fully redistributed to Tribes.

With these caveats in mind, the most common formats of co-management include collaborative agreements, consultation processes, and working groups or advisory committees (Plummer & Fennell, 2007). Collaborative agreements tend to include a formal designation of stewardship responsibilities across the involved parties (Donoghue et al., 2010). Consultation rarely involves actual shared management responsibilities and instead refers to situations in which government agencies are mandated to confer with user groups and stakeholders at some point prior to implementation (Mills & Nie, 2020). Working groups and advisory committees often

involve guidance on management practices developed through shared research and information sharing (Youdelis et al., 2021), whether this guidance is binding is dependent on the agreement which formed the committee.

### *Development of Co-Management Formats*

Whether any one of the possible structures for co-management manifests depends on a number of factors (Plummer & Fennell, 2007). The pathway which leads to co-management occurring has a significant impact on its ultimate structure (Berkes, 2009; Sen & Nielsen, 1996). Most co-management partnerships develop in response to a real or perceived crisis (Berkes, 2009; Castro & Nielsen, 2001; Notzke, 1999). For example, the Caribou Management Board in Canada developed out of a concern from government biologists that the Caribou of Manitoba and Saskatchewan were approaching dangerously low population levels (Notzke, 1999). The Caribou Management Board was an advisory group convened to address this concern and deescalate conflict over the proposed approach to managing Caribou populations by involving Tribal representatives and communicating directly with government agencies and the broader public (Notzke, 1999). As was later discovered, the Caribou population crisis did not manifest, but the role of the Board was maintained with some success (Notzke, 1999).

Crisis is not the only precipitating factor to co-management agreements. As described by Castro and Nielsen (2001), legal pushback or conflict is another common catalyst for co-management agreements. For Tribal groups, this legal pushback is often connected to reserved treaty rights, such as those designating a right to off-reservation hunting, gathering, or fishing (Berkey et al., 2021; Castro & Nielsen, 2001; Notzke,

1999). Where certain rights are not articulated by treaties, legal mechanisms such as the Tribal Self Governance Act are vital for the ability of Tribes to advocate for rights to co-management (Day, 2014).

Jentoft (1998) argues that co-management is contingent upon governing agencies being viewed as socially constructed, and thus highly malleable, institutions. In adopting this viewpoint, previously rigid governing structures can be reimagined. One key aspect of the evolution of co-management as a popular approach to resource management, is the changing understanding of the role of government. As will be discussed later in this chapter, there was a significant shift in the latter two decades of the 20<sup>th</sup> century regarding views on shared resource governance (Castro & Nielsen, 2001; Nie, 2023; Pomeroy & Berkes, 1997). This era focused on decentralization of resource management and a movement towards bottom-up and community-based resource management approaches (Cronkleton et al., 2012; Day, 2014; Pomeroy & Berkes, 1997).

The success of this decentralization, and of any one co-management effort, is dependent upon a number of factors. These factors include the types of user groups involved, the political and social climate of the region and the resource, the expectations set around outcomes, at what stage co-management became adopted, and the resources available to user groups to participate effectively in co-management. Some resources may have unique challenges, such as fisheries management which is made particularly complex by difficulties in defining fishery boundaries, intense commercialization, and its high susceptibility to the impacts of management at other locations (Pomeroy & Berkes, 1997). Whether or not the resource itself is difficult to manage, agreements which rely on user groups to contribute time, funding, or capacity to co-management

can be hindered significantly if those resources are not provided by governing agencies or are already available to user groups (Pomeroy & Berkes, 1997; Raymond-Yakoubian et al., 2017; Stevenson, 2006; Tipa & Welch, 2006).

In addition to the complex nature of defining co-management broadly, its definition in a Tribal context is even more fraught. Tribes have a unique place in co-management structures in that they are unlike other stakeholder or user groups (Nie, 2023; Stevenson, 2006). As sovereign governments with treaties, unique legal standing, and specific rights to manage or access resources, Tribes cannot be treated as identical to other user groups (Day, 2014; Notzke, 1999; TsoSIE, 2007; Vargas-Hernandez, 2012). Along with the legal and governmental intricacies of Tribal co-management, Tribes have unique relationships to land and ecological resources (Simpson, 2014; K. Whyte, 2021; Whyte, 2011). Whyte (2011) elaborates on this relationship by describing Tribal environmental heritage, which reflects both a temporal and cultural identity that is tied to the landscape. As stewards of lands since time immemorial, Tribes have developed and nurtured these relationships such that the health of the Tribe and the health of the landscape are indistinguishable (Berkey et al., 2021; Whyte, 2011). It is because of these legal and cultural factors that Tribes have a special place in co-management frameworks.

To address the legal and cultural rights to co-management, Mills and Nie (2020), recommend that Tribal co-management be defined by principles including the recognition of Tribes as sovereign governments, the incorporation of US trust responsibilities, the existence of structures to enable Tribal involvement, early integration of Tribal management, extensive recognition and incorporation of Tribal

expertise, and the effectiveness of conflict resolution processes. By these principles, co-management with Tribes must go beyond consultation and towards true Tribal self-determination in land management (Nie, 2023; TsoSIE, 2007). Possible roles for Tribes in co-management regimes can include the setting of objectives and standards for management, the implementation of those standards, and the enforcement of those standards (Nie, 2023).

One commonly referenced example of Tribal co-management in the United States is the Nez Perce Tribe's management of the gray wolf in Idaho (Wilson, 2002). Through a contractual agreement between the US Forest Service and the Nez Perce Tribe, the Tribe was able to play a significant role in the reintroduction of the Gray Wolf into the Central Idaho region of the Rocky Mountains (Donoghue et al., 2010; Wilson, 2002). The Gray Wolf is integral to the cultural livelihood of Nez Perce and is a key part of their creation story (Donoghue et al., 2010). By serving in a leadership role within the reintroduction program, the Tribe was able to demonstrate their capacity to implement resource management projects that achieve both federal ecological goals and Tribal cultural objectives (Donoghue et al., 2010; Long & Lake, 2018; Wilson, 2002). This case is considered a strong example of an effective partnership between a public land agency and a Tribal government (Long & Lake, 2018; Wilson, 2002). As explained by Donoghue et al., (2010) “[the] Tribe viewed their involvement in Idaho’s wolf recovery effort as one founded in their treaty right to harvest wolves, which was reserved when their treaty was signed with the federal government in 1855.” This, combined with the recognition of the value of traditional ecological knowledge, a functional conflict resolution process, and

significant contractual outsourcing to the Tribe, demonstrates some of the principles described by Mills and Nie (2020) in action.

While this study will focus specifically on case studies within the United States and Canada, there are a number of cases from Australia which have contributed to the literature on Tribal co-management. In Western Australia, co-management with Aboriginal Tribes is a key part of the governments approach to incorporating Tribal perspectives into resource management (Hill, 2011). The Miriuwung-Gajerrong developed a Cultural Planning Framework to help initiate co-management of the first Indigenous-owned protected area in the state. The Framework consisted of small group planning sessions, workshops on Tribal knowledge and management, a participatory design process for the protected area, and an agreement on funding to pay the traditional owners of the area for their involvement in the planning process (Hill, 2011). Hill (2011), conducted a series of interviews with participants in the process and found that the Indigenous initiation of the process, combined with government willingness to acknowledge a negative history of resource management, were vital factors to the success of the planning.

One key finding of Hill's (2011) study was the importance of what the author referred to as the Right People, Right Place, Right Engagement framework. Interviewees in the study repeatedly mentioned the importance of having representative engagement in the process; in other words that the Right People represented Tribal interests. Similarly, respondents emphasized the importance of actually spending time in the landscape being managed, and doing so within a truly participatory process (Hill, 2011). These same findings are illustrated in other case studies of Tribal co-management.

Numerous authors note that conflict can arise if the views expressed by Tribal representatives are not actually illustrative of the viewpoints of Tribal members at large (Stevenson, 2006; Whyte, 2011).

As discussed by Mills and Nie (2020), the integration and recognition of Traditional Ecological Knowledge (TEK) and expertise is key to the success of Tribal co-management frameworks. Folding TEK into co-management frameworks is highly complicated for a number of reasons (Houde, 2007; Mills & Nie, 2020; Nie, 2023; Notzke, 1999; K. Whyte, 2018). Houde (2007) reviewed the literature on integration of TEK in natural resource management and identified “six faces of TEK” that show up in resource management settings. The face most often recognized by resource managers is one in which TEK serves as a set of specific facts and observations about a place. Other faces situate TEK in temporal contexts as a body of knowledge about the lands past or a Tribe’s creation stories. Finally, multiple faces understand TEK as a system through which Indigenous people view themselves and the landscape.

While none of the faces of TEK are inherently false, their use and application by resource managers can be problematic and may lead to the exploitation of Indigenous knowledges without the inclusion of Indigenous peoples (Houde, 2007; Raymond-Yakoubian et al., 2017; K. P. Whyte, 2011). Even within Indigenous communities, there can be conflict about what constitutes TEK, how it is applied, and how it is shared with those outside of the Tribe (Donoghue et al., 2010). All of this is to say that even when there are clear guidelines for *what* should be considered in the development of co-management agreements, it is not easy to determine *how* these factors are incorporated.

### *Critiques of Co-Management*

In spite of the promises of co-management, there are a number of challenges and critiques of its usefulness in application. These include critiques of the *over* promises of co-management, the power structures embedded in many co-management regimes, and the incongruency that occurs between local and non-local epistemologies. With regard to the over promises of co-management, many advocates for co-management argue that it results in more equitable power balances between local user groups and state actors (Castro & Nielsen, 2001; Hill, 2011). While this may be true in certain circumstances, it is not a guarantee and many co-management regimes fall short of the promises they make (Hill, 2011; Pomeroy & Berkes, 1997; Sanders, n.d.). Numerous authors reiterate the importance of tempering expectations and making clear what a proposed co-management regime can and cannot accomplish (Plummer & Fitzgibbon, 2004; Stevenson, 2006).

The reasons for falling short of the promises of co-management are often rooted in the power imbalances between local user groups and state agencies (Castro & Nielsen, 2001; Cronkleton et al., 2012). Although co-management may offer a pathway towards amending these imbalances, their initial existence is difficult to ignore or overcome. Occasionally these imbalances lead to coercion of local user groups or end up simply restructuring the imbalances into a new form (Berkes, 2009; Castro & Nielsen, 2001; Jentoft et al., 1998; Spaeder & Feit, 2005). This is particularly true for Indigenous user groups who are often stuck in social ecological traps. Long and Lake (2018) describe social ecological traps as persistent, undesirable states that occur in state-Indigenous interactions around ecological systems. For example, state agencies may be more



interested in maximizing certain outcomes such as timber production, at the expense of Indigenous priorities such as protection of gathering sites (Long & Lake, 2018). In this situation, most co-management regimes are unequipped to address this divergence in goals and the state's political primacy will almost always eclipse the concerns of Indigenous users.

One of the most entrenched and difficult conflicts in state-Indigenous co-management regimes is the incongruence of western and Indigenous ecological epistemologies and the erasure of Indigenous ontologies (Berkes, 2009; Castro & Nielsen, 2001; Houde, 2007; Stevenson, 2006). In any circumstance where a smaller, local, user group's perspective differs from the dominant state paradigm challenges will occur (Phelan Hand, 2023). For Indigenous user groups, this often stems from epistemologies which view nature not as a resource to be managed, but as relationships to be tended through acts of kinship and reciprocity (Berkey et al., 2021; Whyte, 2021).

As explained by Berkey et al. (2021), differences in language and knowledge types between these groups frequently result in miscommunication, or dismissal of Indigenous knowledge. When the English language may not have the words sufficient to describe Indigenous epistemologies, state scientists and land managers may be unable to appreciate the views expressed by Native people and either misunderstand or distrust the knowledge on which these views are built (Berkes, 2009; Berkey et al., 2021). This divergence, coupled with a history of negative relationships with public land management agencies, makes for a particularly fraught process of developing co-management regimes (Cantzler & Huynh, 2016; Long & Lake, 2018).

While much of the existing literature on Tribal co-management describes its challenges, many authors also note the various components of co-management that can result in improved social and ecological outcomes (Long & Lake, 2018; Mills & Nie, 2022; Plummer & Fennell, 2007). When TEK and local knowledge are not dismissed or appropriated, the integration of these knowledges with state resources and capacity can increase the veracity of management (Berkes, 2009; Plummer & Fitzgibbon, 2004; Raymond-Yakoubian et al., 2017). Whereas larger state entities may have deep awareness of the social and ecological dynamics affecting a broader bioregion, the knowledge of Tribal communities is highly localized. The ability to combine both allows for the integration of scaled knowledge to inform public lands policy (Murray & King, 2012).

Even in situations where conflict or disagreement still occurs, the possibility for enhanced relationships and credibility amongst partners can mean that these conflicts are better navigated (Plummer & Fitzgibbon, 2004; Pomeroy, 1995). Co-management partnerships also provide opportunities for increasing the awareness of the unique challenges faced by Tribes, as well as the ways in which agencies may be able to provide resources to address these challenges (Phelan Hand, 2023; Raymond-Yakoubian et al., 2017). By working through conflict and deepening the informed relationships between Tribes and public land agencies, co-management can provide increased decision-making power and influence for local user groups and Tribes (Berkes, 2009; Mills & Nie, 2022; Plummer & Fitzgibbon, 2004). The key question that emerges from examining the strengths and challenges of co-management is if and how management frameworks can scale up from their highly localized setting to be applicable to new contexts and places.

This includes the ability of these frameworks to meet the needs of local user groups and Tribes while incorporating the capacity and resources of land management agencies (Pomeroy & Berkes, 1997).

### *Situating Co-management in Theory*

To answer the questions of scale, implementation, and power imbalances, numerous theoretical disciplines have been lent to the examination of co-management. As noted above, co-management as a framework was not developed out of one theoretical approach. Rather, its conceptualization evolved from a series of case studies with theoretical analysis done post hoc. Early efforts to provide a theoretical analysis for co-management stem from Ostrom's common pool resources theory (Cox et al., 2010; Jentoft et al., 1998; Plummer & Fennell, 2007; Plummer & Fitzgibbon, 2004). Emerging in response to the failures of global, highly centralized management regimes, common pool resources theory emphasizes the importance of polycentric governance models and integration of local users in the development of management regimes (Jentoft et al., 1998; Plummer & Fennell, 2007; Robbins, 2012). Most importantly for co-management, common pool resources theory rejected the notion that local user groups were incapable of self-organization and provided frameworks for both the development and analysis of bridging local and centralized management approaches (Cox et al., 2010).

Along with common pool resources, other popularly applied theoretical lenses in co-management literature include legal pluralism, organizational psychology, governance theory, theories of property regimes, and decolonial theory. Alongside these disciplines, political ecologists have also taken up co-management as topic worthy of examination (Spaeder, 2005). Much like co-management, political ecology eludes an

exact definition. Robbins (2012) asserts that political ecology is neither a theory nor a method, but rather a community of practice that develops a “chain of explanation.” In the case of this research, that chain of explanation will focus on the mechanisms through which Tribal co-management achieves some, but often not all of its intended goals. Although political ecology may not undergird a specific *theory* through which to understand co-management, it does provide a theoretical toolbox with which to assess the power structures that influence co-management.

The usefulness of political ecology as an analytical approach stems from its focus on the political, economic, and social structures which dictate the relationships humans have to the environment and the ways in which these structures lead to environmental degradation (Brock et al., 2020; Neumann, 1992; Robbins, 2012). Similar to common pool resources, political ecology was developed in opposition to the explanations of degradation which placed blame on overpopulation, economic irrationality, and technological inadequacy (Neumann, 1992; Robbins, 2012). In refuting the commonly held belief that these factors were the underlying reasons for global environmental degradation, political ecologists assert that all degradation is the result of political choices which designate sites of extraction, dispossession, conservation, and development (Neumann, 1992; Robbins, 2012). These choices result in the key outcome of interest for political ecologists, the question of who benefits and who suffers, or what is sustained and what is degraded.

Whereas the broader field of political ecology focuses on the relationship between political actors, land users, and land management, Indigenous political ecology (IPE) clarifies that focus through the lens of *Indigenous* relationship to land and the colonial

powers that impact that relationship. IPE allows us to examine co-management using the tools of political ecology but by centering political concerns and processes specific to Indigenous people (Middleton, 2015). Dr. Beth Rose Middleton's *Jahát Jat'totòdom: toward an Indigenous political ecology* (2015) identifies four key elements of IPE: (1) attention to 'coloniality'; (2) culturally specific approaches that reframe analyses in keeping with Indigenous knowledge systems; (3) recognition and prioritization of indigenous self-determination, and (4) attention to decolonizing processes. In asking who benefits, who suffers, what is sustained, and what is degraded, IPE looks not just at access to power and land but at how that access is influenced by coloniality and how remedies to structural imbalances can fully honor the Indigenous right to self-determination and bio-cultural sovereignty.

Remedying these imbalances and restoring sovereignty is often referred to by Indigenous political ecologists as a process of healing (Brock et al., 2020; Mortimer, 2020; Vargas-Hernandez, 2012). In applying the key elements described by Middleton (2015), IPE allows for the examination of pathways towards this healing process. This research will use an IPE approach to assess whether co-management provides a pathway towards healing Indigenous relationships to land and increases Indigenous sovereignty in homelands management. To conduct this assessment, metrics for successful comanagement were adapted from those described by Mills and Nie (2020).

## **CHAPTER 2: POSITIONALITY, RESEARCH DESIGN, AND METHODOLOGY**

### *Positionality Statement*

As a non-native white woman, I recognize that my role in this field of work is to be an ally and an accomplice to the liberation efforts of Indigenous peoples. I come to the field of Indigenous environmental justice and land management after working with the US Forest Service as a trail worker and as a Tribal Liaison for the State of California's Sacramento-San Joaquin Delta Conservancy. During my time with these agencies, I developed a passion for the protection and restoration of the California landscape. At the same time, I increased my awareness of the fundamental problems with public land agency management that excludes Native people as rightful stewards of the land. As someone who cares deeply about the California landscape, I believe the only way for me to ethically engage in land management work is to center Native people and to actively work for the rematriation of their homelands. It is for this reason that I ask whether co-management can serve as an interim step on the pathway towards total land rematriation, healing, and decolonization.

### *Analysis Framework*

Articulated beautifully by Mills and Nie ((2020), see page 24 of this document)), the six components of Tribal co-management that may be indicative of pathways towards healing will be the metrics by which this research evaluates co-management case studies. These components address Middleton's elements of IPE by:

- 1) Attention to coloniality in co-management: Colonialism is often expressed via its impact on the landscape (Middleton, 2015). Processes such as vicious sedimentation are one expression of this and, if co-management regimes do not

adequately interrupt this system, they cannot be considered to disrupt colonial management regimes. One way to gauge whether there is a commitment on the part of land management agencies to mitigate vicious sedimentation is by analyzing the extent of their incorporation of trust responsibilities. For states and Canadian governments which do not adhere to the same type of legal trust responsibility, I considered proxies for trust responsibility. These proxies included stated recognition of the importance of landscape health in preservation of Indigenous cultural and subsistence practices as well as the responsibility of the state to the preservation of state-controlled landscapes.

- 2) Culturally specific approaches that reframe analyses in keeping with indigenous knowledge systems: Colonial disregard and attempts at erasing Indigenous knowledge systems have plagued historic land management regimes. Determining whether co-management regimes stray from this history and demonstrate respect for Indigenous knowledge systems is key for assessing their success. Components of this respect may include allowance for land management approaches that consider values outside of capital and “productivity”, such as cultural and spiritual values of land, or whether Tribal knowledges of the ecosystem itself are integrated into management decisions.
- 3) Recognition and Prioritization of Indigenous Self-Determination: Addressed through multiple components of Mills and Nie’s (2020) Tribal-co-management definition, self-determination was assessed via the acknowledgement and honoring of Tribal sovereignty, prioritization of government-to-government relationships, and the incorporation of Indigenous governance systems (such as consensus-based conflict resolution). Additionally, allowing for the early

integration of Tribal management and the existence of structures that enable Tribal involvement helps to indicate whether co-management regimes result in increased Indigenous self-determination.

- 4) Attention to Decolonizing Process: Lastly, and with the greatest complexity, each of the six components of Mills and Nie's (2020) definition will be taken in their totality to determine whether a co-management regime moves the needle at all towards decolonization. Decolonization cannot be captured by a singular metric, as it encompasses the entirety of dismantling systems of colonial praxis. Co-management, by virtue of being under the purview of state land management regimes, cannot ever result in full decolonization. Instead, this study examines whether co-management is a viable interim point on the pathway towards total decolonization.

### *Thematic Literature Review*

Systematic literature reviews are a method of synthesizing existing literature on a given topic (Lame, 2019). They are necessarily reproducible and follow a specific process for the collection and analysis of their findings (Okoli, 2015). There are numerous methods through which researchers can collect and synthesize data from existing literature, each with their own advantages and disadvantages (Dixon-Woods et al., 2005). One of the most common methods for assessing qualitative data, is through the application of a thematic review process. Thematic reviews require the identification of recurring and common findings within the literature on a given topic (Dixon-Woods et al., 2005). Because of the qualitative nature of nearly all co-management research, a systematized thematic review was used. This allows for the identification and interpretation of identified themes while ensuring the flexibility needed to address



emerging themes. One of the possible pitfalls of a thematic analysis is a lack of transparency which can impede the reproducibility of the analysis (Dixon-Woods et al., 2005). To avoid this, I attempt to provide sufficient detail on my methodology.

By conducting a systematized thematic literature review, I provide a thorough synthesis and analysis of research on Tribal co-management while identifying gaps in the research and areas for future study. Although the topic of co-management is increasing in popularity in land management regimes, there is still a lack of sufficient research on Tribal co-management as a whole. This research will create a birds-eye view of the existing literature and provide direction for future researchers to address important but under-explored research questions. Additionally, by piloting an evaluation of co-management regimes based on IPE and the Tribal co-management components described by Mills and Nie (2020), I hope to develop an assessment framework that can be utilized in future co-management research.

#### *Data Collection: Inclusion Criteria*

Co-management vs. Other Management Terminology: This analysis will focus specifically on studies of co-management and will not consider examples of Community Forestry. This is because co-management in the context of Tribal engagement is often defined and viewed as a formalized partnership between sovereignties or governing bodies. Community Forestry does not necessitate that the community involved is a distinct governing body and is often applied to mean broader community-level engagement. Studies which specifically refer to co-management will be included as well as studies that utilize synonyms for co-management such as “collaborative management” or “co-stewardship.” Studies which use these terms instead of co-

management will only be included if further review of the study shows that the management regime described is identical to an accepted iteration of co-management. For example, studies which refer to a collaborative management framework in which the regime described only includes community participation in volunteer litter-pick up or citizen science will not be included. Again, the amorphous nature of defining co-management makes it difficult to fully weed out studies until further review of the management regime is conducted.

Region Examined: For the purpose of this analysis, the regions examined in the literature were limited to the United States and Canada. This was for multiple reasons. First, the intended application of this study is to inform the development of co-management agreements between Tribal governments and public land agencies in the United States, particularly in California. Because of this, evaluations of co-management agreements should focus on contexts which closely mirror those in California. This means that the dominant governments involved in the agreements should have significant histories of settler colonialism, particularly histories influenced by the doctrine of discovery, *terra nullis*, and western notions of property and “productive” landscapes.

Types of Studies: Evaluation of co-management agreements is almost always done through case study analysis. Therefore, this research focused exclusively on case studies of co-management agreements. While there is significant and valuable research done in the context of graduate level theses and dissertation work, for the purpose of this analysis only peer-reviewed journal articles and book chapters were considered. Because of the ongoing value of older case studies to provide highly meaningful

information about co-management, a longer window of inclusion than may be typical of policy research was applied to this review. However, recognizing that the context for co-management likely shifts significantly over time, studies older than 1995 were not considered. This cut-off date was chosen because of the adjustment to US Tribal-consultation policy in 1994. Where possible, case studies that were conducted before 2010 were cross-examined with subsequent analysis of the same case in the years after the initial study.

#### *Data Collection: Search Strategy*

The interdisciplinary nature of the topic means that a wide array of databases covering a range of academic disciplines needed to be searched. Gusenbauer and Haddaway (2020) analyzed 28 academic search engines for their suitability for systematic literature reviews. Based on their assessment, two principal search engines and two supplementary engines were used for data collection.

The search strategy will included the following databases:

- JStor (primary)
- Taylor and Francis Online (primary)
- Google Scholar (supplementary)
- Science Direct (supplementary)

Each database was searched using the following combination of terms, and made use of Boolean search capabilities: *“co-management”, “co-management”, “tribe” OR “tribal” OR “native American” OR “Indigenous” OR “First Nations”, Canada, United States, North America*. Because of the many synonyms for co-management, it is possible that the original search terms were not exhaustive. To fill in this possible gap in

search results, snowball sampling was used by looking at the citations of studies that were included in the final analysis and reviewing potentially relevant citations.

An initial examination of every result from the search was conducted by reviewing the titles and abstracts. If searches within each database turned up more results than could reasonably be assessed, as was the case with Google Scholar, I considered a database satisfactorily combed when five subsequent pages revealed no results eligible consideration. This was based on the best practices described by Okoli (2015). Results that were obviously outside of the scope of the analysis were disregarded (e.g., an article with a title that clearly indicates a study was done exclusively in Taiwan, or where the phrase “co-management” is misinterpreted as co-management of hospital patients).

Articles identified as eligible for inclusion during the initial search and review were stored using their hyperlinks in an internal excel database. A second review was conducted on the initial search results by more thoroughly reviewing their abstracts, results, and discussion sections. Articles that passed this secondary review were stored in a separate datasheet with their title, author, date of publishing, location of study, abstract, link, and the search engine from which they were retrieved. Articles that did not meet inclusion criteria were moved to a separate section of the database with their link and title stored as well as a brief note of why they were not included.

#### *Data Collection: Synthesis and Analysis*

The analysis and synthesis of included articles were performed in three stages. First, included articles were reviewed through an initial read-through in which key points about the case studies were identified. These points covered the resource being

managed, the geography of the co-management regime, the type of data collected, a summary of the co-management structure, a summary of the study's findings, and a summary of the limitations of the analysis. For each level of analysis, data was entered into an excel database with the summary information and metrics segmented. Second, each article was reviewed again and coded by the six metrics of effective co-management. Lastly, a final read-through was conducted to ensure any relevant data was coded and included in the database and then summarized with an evaluation of whether the totality of the results demonstrated an attention to decoloniality.

## CHAPTER 3: RESULTS

### *Summary Data*

A total of 305 articles across four search engines and snowball sampling were screened for inclusion. Of those 305, 76 passed the secondary review of the results and discussion sections. Reasons for exclusion after the initial and secondary reviews included: lack of focus on Indigenous perspectives, location outside of the geographic scope, lack of peer review, and misapplication of the term co-management. Each of the 76 remaining articles were reviewed in their entirety to produce the final dataset of 23 articles. Of those that were excluded from the 76, a majority did not contain a true case study or were inconsistent with the research question at hand. Some examples of these rationales for exclusion included case law reviews, data that presented views on *possible* co-management agreements rather than an actual co-management case, or a case study focused on private industry that engaged with Tribes. While 23 articles were included, five featured comparative analysis of two case studies, therefore resulting in a total of 27 case studies analyzed for this study. Many studies utilized a mixed methods approach incorporating interviews, participant observation, and document analysis. Of the included studies, 14 collected data through semi-structured interviews, 10 through participant observation, and 12 through analysis of documents, meeting minutes, and historical records.

<b>Search Engine</b>	<b>Number of Articles Identified</b>	<b>Number of Articles Used in Final Analysis</b>
Google Scholar	114	9
Science Direct	23	1
Taylor and Francis	53	2
JStor	87	4
Snowball Sampling	28	8
<b>Total:</b>	<b>305</b>	<b>23</b>

*Table 1: Summary of search engine results and siphoning of relevant articles*

	<b>First Author, Year</b>	<b>Geography</b>	<b>Resource Managed</b>	<b>Agreement Structure</b>
<b>1</b>	Ayers, 2017	Mo‘omomi and Hā‘ena in Hawaii	Fisheries	Collaborative
<b>2</b>	Baumflek, 2022	Pisgah, Nantahala, NF & Cherokee NF & Great Smoky Mountains NP	Forests	Collaborative
<b>3</b>	Cadman, 2022	Nunatsiavut, Canada	Fisheries	Advisory
<b>4</b>	Cronin, 2007	Walla Walla Basin, OR & Yavapai County, AZ	Watersheds	Collaborative; Advisory
<b>5</b>	Diver, 2016	Klamath NF, CA	Forests	Co-management
<b>6</b>	Donoghue, 2010	Central ID, Plumas NF, CA	Wildlife/Forests	Contractual
<b>7</b>	Ebbins, 2004	WA, AK	Fisheries	Advisory; Advisory
<b>8</b>	Goetz, 2021	British Columbia, Canada	Forests	Collaborative
<b>9</b>	Kofinas, 2023	Canada	Wildlife	Collaborative
<b>10</b>	Levine, 2014	Hawaii	Fisheries	Collaborative
<b>11</b>	Mabee, 2006	British Columbia, Canada	Forests	Collaborative
<b>12</b>	Mulrennan, 2023	James Bay and Northern Quebec, Canada	Forests	Collaborative
<b>13</b>	Murray, 2012	Pacific Rim NP, Canada & Tla-o-qui-aht Tribal Park, Canada	Forests/Conservation Area	Collaborative; Co-management
<b>14</b>	Nadasdy, 2005	Yukon, Canada	Wildlife	Advisory

<b>15</b>	Notzke, 1999	Inuvialuit, Canada	Conservation Area	Advisory
<b>16</b>	Ohlson, 2008	Central Idaho	Wildlife	Contractual
<b>17</b>	Padilla, 2014	Yukon, Canada	Wildlife	Advisory
<b>18</b>	Pinel, 2012	Kasha Katuwe Tent Rocks National Monument, NM	Conservation Area	Co-management
<b>19</b>	Saha, 2015	National Bison Range, MT	Wildlife	Contractual
<b>20</b>	Spaeder, 2005	Alaska	Wildlife	Advisory; Advisory
<b>21</b>	Spak, 2005	Beverly and Qamanirjuaq, Canada & Gwich'in Settlement Area Canada	Wildlife	Advisory; Collaborative
<b>22</b>	Vaughan, 2015	Hā'ena Hawaii	Fisheries	Collaborative
<b>23</b>	Watson, 2013	Alaska	Wildlife	Advisory

*Table 2: Summary list of the included articles*

The results presented a variety of agreement types that were ultimately categorized as either Advisory, Collaborative, Contractual, or Co-management. These categories were determined after conducting the central thematic analysis. Key similarities and differences between agreements were noted. A secondary thematic analysis was completed in order to categorize agreement types according to their common traits. Distinguishing between each of these proved challenging, given that many projects had discrepancies between how they were intended to be structured and how they were ultimately implemented. There was also substantial inconsistency in the language used to describe co-management regimes. Table 3 shows the categorical descriptors that were used to classify the cases.

<b>Classification</b>	<b>Definition and Defining Features</b>
-----------------------	---



Advisory	<ul style="list-style-type: none"> <li>• A formal process for receiving tribal input on management decisions and policies</li> <li>• Distinct from consultive in that Advisory frameworks gather input prior to the full development of policies as opposed to waiting until policies are nearly complete before seeking Tribal approval</li> </ul>
Contractual	<ul style="list-style-type: none"> <li>• Tribes receive contracts to implement management regimes pre-determined by government agencies</li> <li>• There may be opportunities for Tribes to provide input, but they are ultimately acting under the requirements of a formalized contract</li> </ul>
Collaborative	<ul style="list-style-type: none"> <li>• Process whereby Tribes and states entities are making decisions in concert with one another</li> <li>• There may be possibilities or mechanisms for state ministerial override but the expectation in a collaborative agreement is that policies are co-developed</li> </ul>
Full Co-management	<ul style="list-style-type: none"> <li>• Policies and management decisions are made with equal input from Tribes and state entities</li> <li>• The possibilities for contribution are not limited by the resources or capacity of either partner</li> <li>• Where input is not legally equal between Tribes and the state (as is the case in nearly all management regimes), the state operates under de factor equality in which Tribal input is treated as equal</li> </ul>

*Table 3: Categorical descriptions of co-management frameworks reviewed*

*Summary of Findings*

Findings specific to each of the six metrics are addressed in greater detail below. Outside of the metrics, multiple additional themes emerged during the analysis. One of the most frequent themes was the importance of legal standing for advancing the priorities of Indigenous peoples. Nearly all of the cases analyzed were formed out of a legal mandate or court order. These mandates were almost all rooted in established treaty rights and trust responsibilities (Ebbin, 2004; Kofinas, 2023; Mulrennan & Scott, 2023; Nadasdy, 2005; Notzke, 1999; Padilla & Kofinas, 2014b; Spaeder, 2005). In

Canada, Comprehensive Land Claim Agreements (CCLA) were used in most of the examples to establish the co-management regime (Goetze, 2021; Kofinas, 2023; Mulrennan & Scott, 2023; Notzke, 1999; Padilla & Kofinas, 2014). For example, the Torngat Joint Fisheries Board in Nunatsiavut, a land claim area in Northern Labrador, Canada was the result of a CLCA which established a range of co-management agreements for resources in the region, including the fisheries that were at the center of the case study (Cadman et al., 2022).

Alongside the more standard policies that enable co-management, three case studies (Ayers et al., 2017; Levine & Richmond, 2014; Vaughan & Caldwell, 2015) evaluated the implementation of the Hawaiian Community Based Subsistence Fishing Areas legislation (CBSFA). The CBSFA framework was established through Hawaiian State legislation in 1994 to allow for the State's Department of Aquatic Resources to work in collaboration with Native fishing communities to develop local fisheries management rules (Ayers et al., 2017). The intention of the law is to allow Native people to integrate their customs into fisheries management policy, however, while the legislation created opportunities for communities to approach the State in hopes of developing a co-management regime, the process was largely unsuccessful. Reasons for the lack of success range from a failure of the state to provide capacity resources to Native communities, overly bureaucratic processes, and a desire to reframe Native knowledge and practices through the lens of western ecology (Ayers et al., 2017; Levine & Richmond, 2014; Vaughan & Caldwell, 2015). These cases illustrate that, even in circumstances in which policy and legislation enable co-management, they do not guarantee its success.

As discussed in Chapter 1, the promises and expectations set by co-management can sometimes be a source of its own failures. This was true for a number of cases examined here (Mabee & Hoberg, 2006; Ohlson et al., 2008). Mabee and Hoberg (2006) explained how First Nations involved in co-management of the Clayoquot Sound were disappointed and at times lost faith in the management process because it failed to live up to expectations of power equity. Interestingly, the inverse of this was also true in situations where co-management was not over-promised. In the case of the Nez Perce contract to manage the Gray Wolf recovery in Central Idaho, Tribal and government interviewees felt that their partnership was extremely successful, despite falling into the “Contractual” categorization (Pinel & Pecos, 2012). This was likely due to the original framing of the partnership in which roles were clearly identified early on and both groups followed and respected their roles.

What did not work, however, was an attempt to reframe expectations midway through the co-management process. In the case of the Porcupine Caribou Management Board in Canada, difficulties with balancing diverse expectations and viewpoints amongst First Nations hunters led to a reversal of the Board’s regulation on Caribou hunting (Padilla & Kofinas, 2014). While the original intention behind the development of the Board’s co-management framework was to create shared authority between First Nations and government agencies over hunting regulations in the region, the failure to develop a conflict resolution process *within* First Nations as well as between First Nations and government agencies led to its failure to uphold a contested regulation. The authors indicated that, while the policy itself may have failed, the co-management process may not have if it is considered “one step” in the learning process for the

governing agencies. Similarly, in the case of the National Bison Range, as described by Saha and Hill-Hart (2015), deep internal divides at the US Fish and Wildlife Service (USFWS) led to an extraordinary breakdown in co-management efforts that resulted in numerous lawsuits and heightened conflict between the USFWS and participating Tribes.

Lastly, co-management regimes were often subject to the fickle and difficult nature of local politics and relationships. For example, in the Ti Bar Demonstration Project in the Klamath National Forest, what was initially an incredibly successful co-management regime was abandoned when USFS leadership turnover resulted in the loss of a key staffer within the agency (Diver, 2016). Similarly, the influence of special interest groups in local land management policies presented difficulties for creating and enforcing regulations developed by co-management regimes. These special interest groups were sometimes commercial fishing industries (Spaeder, 2005), non-Native members of the general public, (Levine & Richmond, 2014), or non-Native subsistence groups (Ebbin, 2004).

Despite the challenges to co-management that are highlighted by this research, the final theme I'd like to address is one of progress. This theme will be explored in greater detail in Chapter 4, but there were numerous examples in the selected cases in which co-management led to positive outcomes, even if its overall goals were not entirely met. Murray and King (2012) highlight the work done at the Pacific Rim National Park Reserve in British Columbia. While by no means perfect (as the system still requires First Nations to operate within the constraints of a Euro-Canadian bureaucracy) management of the park has engaged in what the authors refer to as “an

unprecedented level of consultation.” This consultation, or Collaboration as defined by this current research, has allowed for increased integration of TEK, better interpretive services about First Nations history in the region, and increased employment for First Nations people within the park (Murray & King, 2012). Other examples of a mixed-results outcome in which co-management had both positive and negative effects include co-management of the Clayoquot Sound with the Nuuchahnulth (Goetze, 2021), the Western Arctic (Inuvialuit) Final Agreement (Notzke, 1999), the Qavilnguut Caribou Working Group (Spaeder, 2005), the Kasha Katuwe Tent Rocks National Monument (Pinel & Pecos, 2012), the Ti Bar Demonstration Project in the Klamath National Forest (Diver, 2016), and the Gwich'in Renewable Resource Board (Spak, 2005).

### *Respect for Sovereignty*

Perhaps most important for assessing the success of co-management regimes, is examining whether they demonstrate or result in a respect for Indigenous sovereignty. Overall, the cases examined showed that even in well-executed and well-received cases of co-management, sovereignty is rarely advanced. Some Indigenous groups viewed the process of co-management as rooted in treaty-guaranteed rights (Cadman et al., 2022; Levine & Richmond, 2014; Ohlson et al., 2008; Pinel & Pecos, 2012), or as an expression of sovereignty itself (Baumflek et al., 2022). However, most examples resulted in little advancement or recognition of sovereignty on the part of the government agencies. There were also instances in which Tribes felt that they had to choose between advancing their sovereignty or advancing their economic well-being (Cronin & Ostergren, 2007; Mulrennan & Scott, 2023). In most cases, regardless of the quality of the partnership, by forcing Indigenous people to operate under the structure of a

western, colonial land management regime, sovereignty was inherently neglected. However, even in cases in which sovereignty was not directly advanced, the co-management process is believed to have increased equity in certain land management regimes (Diver, 2016; Padilla & Kofinas, 2014).

### *Trust Responsibilities*

Although the capacity of co-management to address sovereignty may have fallen short, the incorporation of trust responsibilities (or their proxies) was successfully implemented in many cases. The CLCA process in Canada led to the involvement of First Nations in a range of co-management regimes with the stated goal of maintaining access to subsistence and cultural resources (Cadman et al., 2022; Goetze, 2021; Kofinas, 2023; Mulrennan & Scott, 2023; Nadasdy, 2005; Notzke, 1999; Padilla & Kofinas, 2014b; Spak, 2005). Mulrennan and Scott (2023) credit this to the structure of many Canadian policies regarding Indigenous peoples, which they describe as advancing “mutual resonance.” Similar to the relevance of legal mandates, the incorporation of trust responsibilities was a vital enabler for many co-management regimes. This most often showed up as the protection of harvesting rights, as in the case of the Nez Perce wolf recovery (Donoghue et al., 2010), caribou and bear hunting in Alaska (Spaeder, 2005), geese in Alaska (Watson, 2013), cultural burning in California, (Diver, 2016) and salmon fisheries in Washington (Ebbin, 2004).

### *Conflict Resolution*

Many, if not nearly all, of the cases analyzed developed co-management regimes in response to a real or perceived crisis or conflict. In this way, the co-management regimes themselves were an attempt at conflict resolution. Within the regimes, various

approaches to resolving conflict were described. Most commonly, consensus-based approaches to decision making were utilized in order to establish feelings of trust between the groups (Mabee & Hoberg, 2006; Spaeder, 2005). In many of these cases where consensus could not ultimately be reached, decision-making groups turned to a vote or deferred to a ministerial/agency leader. The Central Region Board in Clayoquot Sound required that a double majority exist when votes become necessary and that within this group there must be a majority of First Nations representatives voting in favor (Mabee & Hoberg, 2006). The process of consensus building was not always well received, as in the case of the Interim Measures Agreement for Clayoquot Sound in which government Board members felt that the process was tedious in comparison to the western, hierarchical approach to decision making (Goetze, 2021).

Finally, there were some examples in which conflict resolution efforts failed. Most notably, Saha and Hill-Hart (2015) describes the failure of the USFWS to garner support and buy-in from much of the staff involved in the agreements with Tribes at the National Bison Range (NBR). Three separate efforts have been made to develop functional agreements with Tribes at the NBR. Working under the Tribal Self Governance Act, Tribes pushed the USFWS to contract out certain management responsibilities at the NBR, such as fieldworker and administrative positions. This work did not involve meaningful decision-making engagement with Tribes and still resulted in vitriolic conflict in which staff at the USFWS eventually sued to halt the contracts. The reasons for this entrenched conflict are numerous, but the racism of many USFWS staff and their dismissal of Tribal competence was certainly a contributing factor. Similar challenges with the denigration of Tribal knowledge and participation by agency

staff were present in the Ti Bar Demonstration Project with the Karuk Tribe in California (Diver, 2016). Along with the more tangible impacts, such as the lawsuits in the case of the NBR, this conflict impacts the ability of co-management partners to develop and maintain trust.

In some cases, leveraging conflict was an effective approach for Tribal leaders to motivate the development of co-management regimes. In the Ti Bar Demonstration Project in the Klamath National Forest, Karuk Tribal members engaged in protracted conflict and activism in order to push the USFS to engage with Tribes in land management decision making. This conflict occurred at what Diver (2016) referred to as a “pivot point” in which influence over the USFS could be wielded most effectively by Tribes. The conflict occurred as the Klamath NF was developing its Land and Resource Management Plan, which meant that a resolution to the conflict could be integrated into this key USFS policy document (Diver, 2016).

### *Timing of Tribal Involvement*

As described above, nearly all of the cases examined were developed in response to conflict. It seems safe to say, then, that the timing of Tribal involvement in the management regimes was almost always far too late. There are a couple of exceptions to this, including the Karuk Tribe’s work with the Klamath National Forest, Maidu’s involvement with the Plumas National Forest, and the Bureau of Land Management’s work at Kasha Katuwe Tent Rocks National Monument. Early on in the aftermath of being declared a National Monument, BLM staff at the field office responsible for Kasha Katuwe in New Mexico sought to develop a meaningful partnership with the Pueblo de Cochiti’ (Pinel & Pecos, 2012). This early involvement meant that much of the



Monument's facilities and management practices were established in coordination with the Pueblo and informed by an intergovernmental cooperative agreement (Pinel & Pecos, 2012). Pinel and Pecos (2012) note that, because the partnership developed out of intentional outreach by the BLM, as opposed to a court mandate, the process has been socially rather than legally constructed.

Outside of the timing to initiate co-management, three separate studies of the Community Based Subsistence Fishing Areas in Hawaii addressed the challenges of prolonged bureaucratic processes that prevented timely implementation of co-management agreements. Levine and Richmond (2014) explain that, despite heavy interest and buy-in from the Native community involved in the agreement development, the rule-making process was so time consuming that the agreement was ultimately abandoned. The arduous process worked to the impediment of both Native communities and the State which also had its time-management capacity drained by the process (Vaughan & Caldwell, 2015). This capacity drain occurred despite the assistance of a bridging organization to help manage the process (Vaughan & Caldwell, 2015).

### *Integration of Tribal Expertise*

Many studies focused on integration of tribal expertise, with some cases identifying it as the primary goal of the co-management process (Baumflek et al., 2022; Donoghue et al., 2010). The results were mixed in terms of whether integration of TEK and expertise was actually successful. In some cases, such as the Pacific Rim National Park Reserve and the Gwich'in Renewable Resource Board, integration of knowledge and expertise was well executed (Murray & King, 2012). This is likely due to the higher

levels of First Nations involvement in these regimes and the respect of government employees for Indigenous knowledge.

These successes were somewhat outside of the norm, with most examples having either some level of difficulty integrating TEK or an outright disregard for its value (Donoghue et al., 2010). Nadasdy (2005) explores this in great detail by examining the Ruby Range Sheep Steering Committee in the Yukon territory of Canada. Based on observations and conversations with participants in the Steering Committee, Nadasdy (2005) outlines a series of complaints about the ways that TEK was exploited. Specifically, Nadasdy (2005) notes that TEK was often integrated only when it was able to reaffirm the perspectives of the government agencies. Because of this, First Nations participating in the Steering Committee were eventually forced to find ways to couch TEK in the language of western science (Nadasdy, 2005). Attempts to either exploit TEK in order to confirm western science, or to retrofit TEK into western science were reported in the cases of Interim Measures Agreement for Clayoquot Sound (Goetze, 2021) and Hawaii's Community Based Subsistence Fishing Areas (Levine & Richmond, 2014).

### *Structure for Tribal Involvement*

One of the most challenging aspects of assessing co-management regimes in ways that are applicable across multiple localities and contexts, is that each structure is different. In addition to the agreement structure classifications described above, I also sought to identify components of these agreements that impact the different varieties of power, relationships, and influence that can be wielded by Tribes or governing agencies. Agreement types all have various levels of bureaucratic and funding support

mechanisms that impact the structure for Tribal involvement. In reviewing the case studies, I sought to identify commonalities that can be applied to multiple types of agreements (e.g. both Contractual and Advisory). These commonalities can be grouped by resource, bureaucratic, and influence structures.

The capacity of Tribes to be substantively involved in these co-management efforts was often impacted by the time and funding availability to Tribes. Not all of the studies addressed whether funding or additional resources were provided to Tribes, but, for those that did, two camps emerged. In one, funding and resources were not provided and that lack of capacity support resulted in impediments to Tribal involvement (Kofinas, 2023; Mabee & Hoberg, 2006; Murray & King, 2012). In the case of the Porcupine Caribou Management Agreement in Canada, the lack of support led to Tribes feeling especially dependent on government agencies to implement the work they proposed (Kofinas, 2023). In the case of the CBSFA's, the lack of resources impacted both the State and Tribal participation as neither had additional funding to help support the program's development (Levine & Richmond, 2014). There were exceptions to this challenge, such as the work of the Eastern Band of Cherokee Indians with the USFS in which additional funding and resources were provided to enable the integration of Tribal knowledge and expertise in forest management (Baumflek et al., 2022).

One of the likely reasons that limited funding and resources proved hindering for many co-management regimes, is the amount of capacity needed to successfully navigate the bureaucratic process of working with land management agencies. Even in relatively successful co-management arrangements, such as the Pacific Rim National Park Reserve, confusion around jurisdiction and the scope of the co-management

regime negatively impacted its reception and implementation (Murray & King, 2012). Lack of clarity was a common challenge in the bureaucratic operations of land management agencies. For example, in the CBSFA legislation, the responsibility for defining “community” was left to the communities themselves (Ayers et al., 2017). This created an additional barrier, in which Native people were required to navigate the local politics of non-Native groups within the nearby community in order to bring a proposal to the State (Ayers et al., 2017).

The challenge of navigating the politics of non-Native groups was present in numerous cases and represents the final structural challenge that repeatedly emerged in this research. The influence of Indigenous people within the regimes was highly dependent on how they were positioned relative to other stakeholders (Cadman et al., 2022; Ebbin, 2004). In the case of the Kuskokwim River Salmon Management Working Group in Alaska, Tribal knowledge had to be integrated with other local knowledge held by non-Native people (Ebbin, 2004). Ultimately, Tribes felt that overcoming the conflict this presented and being able to come to a group consensus led to further legitimation of their knowledge (Ebbin, 2004). The ability to navigate conflict and build consensus was one way in which Tribes successfully wielded “soft power” within co-management regimes (Spak, 2005).

## **CHAPTER 4: DISCUSSION**

The purpose of this research was to examine whether evidence exists for the efficacy of co-management regimes in advancing bio-cultural sovereignty, Indigenous self-determination in homelands management, and access to traditional homelands. This examination was done using a systematized thematic literature review of 23 papers which included 27 case studies of co-management regimes across Canada and the United States. These two countries were chosen because of their shared histories of settler colonialism which were built through the legal doctrines and governance systems of the English monarchy in the 18<sup>th</sup> century. While substantial literature exists in other regions of the Global North, such as Australia, the intended purpose of this research is to inform Indigenous advocates and policy leaders in California and the Western United States. A systematized thematic analysis approach was used in order to assess the co-management literature as a whole, rather than through the lessons and insights of a singular case study.

The tools of Indigenous Political Ecology were applied in order to establish the framework for case study assessment and determine whether the regimes resulted in the desired outcomes. Using the metrics of successful Tribal co-management described by Mills and Nie (2020), the analysis shows mixed results on the effectiveness of co-management regimes. As a whole, the literature on co-management indicates that while it can be used to advance certain goals of collaboration, it rarely, if ever, results in the advancement of true bio-cultural sovereignty. Importantly, however, co-management regimes do not appear to make things worse. Rather, they most often fall short of the grand promises made by advocates for decentralized land management.

### *Limitations of this research*

Before I can confidently discuss the value and applications of this research, it is important to identify its limitations. Firstly, there are limitations to the geographic applicability of this research. As with all land-based work, the context of land management is highly localized. While the model used in successful examples of co-management such as the Kasha Katuwe Tent Rocks National Monument may have worked in that particular case, the nuances of local politics and relationships may mean the model does not work elsewhere. The impacts of locality were demonstrated in the Qavilnguut Caribou Working Group and the Qavilnguut Mountain Brown Bear policies of Alaska, in which conflict in one co-management regime hindered the work of another (Spaeder, 2005). Along with the discrepancies between Indigenous policies in Canada and the United States, there is internal variation in Tribal policies within the US. This is particularly true for Hawaii and Alaska where Tribal policies were developed during a different era of settler colonialism than that in the continental US, which impacted the legal recognition and treaty rights for Native people in these regions.

Even if these local nuances did not impact the applicability of different models across different locations, the regimes covered in this analysis do not cover the entirety of co-management regimes within the two countries. Because this study was limited to the cases covered by peer-reviewed research, there are likely many more examples of co-management regimes, both successful and not, which may inform the development of new approaches. Peer reviewed literature on this topic is somewhat scarce, and much of it exists in the form of law reviews which, though informative, fell outside of the scope of this study. Given that law reviews provide case study analysis from the perspective of

legal tools, mechanisms, and history, they were less useful in assessing Tribal viewpoints and experiences.

It is also likely that there is bias within the dataset due to the self-selective nature of these case studies. The cases which get selected for peer reviewed study may be chosen because of some unique attribute or the accessibility of information that makes them appealing for research. Similarly, the details shared in the case studies are susceptible to biases of what the authors feel is relevant to their analysis. For this reason, it is possible that the analysis was skewed by context or data that I did not have access to through the literature.

### *Implications for Land Management Policy*

Given the mixed results of this analysis, I attempt to parse out the pertinent and useful lessons for policy makers and land managers looking to develop or improve co-management regimes. On a purely pragmatic level, there are implications for the capacity of land managers that can be learned from the cases studied here. As discussed earlier in this paper, the climate crisis has ignited a fervor for more hands-on land management approaches (Hazelhurst, n.d.). California Governor Gavin Newsom's call for increased collaboration with Tribes, as well as the joint agreement between California and the USFS to increase forest fuels treatment by a substantial amount, will require a significant expansion to the State's capacity for land management.

Engagement with the landscape's historic stewards who have demonstrable knowledge and experience in tending for the land will certainly contribute to this increased capacity. The cases of the Nez Perce wolf recover, the Maidu Stewardship Project, Kasha Katuwe Tent Rock National Monument, Pacific Rim National Park

Reserve, and the Tla-o-qui-aht Tribal Park all demonstrate the competence and ability of Tribes to contribute to land management regimes, both in western and Indigenous approaches. It is important to note that the ability for Tribes to contribute their expertise is contingent upon the support of the land management agencies through provision of the necessary resources and funding.

To support the engagement of Tribes in land management regimes, land managers and policy makers should seek to mitigate the impacts of bureaucracy on Tribal participation. As shown in multiple examinations of the Hawaiian CBSFA system, even with significant community buy-in, the assistance of a bridging organization, and demonstrated capacity for Native communities to engage in land management, the obstruction of arduous bureaucracy is difficult to overcome (Ayers et al., 2017; Levine & Richmond, 2014; Vaughan & Caldwell, 2015). This bureaucracy not only impedes the ability of Tribes to participate in programs designed to increase their involvement, it also impedes the ability of government agencies to enact legislative mandates around this participation in a successful manner.

More amorphous elements of increasing Tribal engagement in land management regimes, rely not just on what legislation can formally promise or enable, but on a cultural shift in attitudes towards Native people. In order to develop effective partnership relationships, agency leaders must be willing to trust the competence and wisdom of Tribes while respecting cultural practices that non-Native people may not be able to access. Leaders must be willing to meet Tribal members where they are at, both literally and figuratively. Staff members at land management agencies engaged in the Gwich'in Renewable Resource Board in Canada regularly conducted meetings, field



work, and visits with Tribal leaders in their communities, rather than assuming the time and capacity for Tribal members to travel to urban agency offices (Spak, 2005).

Along with the intrinsic trust required of agency leaders, they must also be willing to defer power and knowledge supremacy to traditional knowledge holders. The integration of Traditional Ecological Knowledge is incredibly delicate and one of the areas in which agencies are most likely to erode the trust and confidence of Tribal partners. Non-native agency staff and leadership cannot hope to wield the knowledge of Indigenous people or exploit the relationship of Indigenous people to their homelands in a way that allows for truly successful land management practices. TEK and its holders cannot be decoupled and if agencies truly hope to integrate Tribal knowledge into land management policy, they must develop structures for knowledge holders to lead, own, and monitor that integration.

Though difficult to navigate, these amorphous elements are key to the success of co-management regimes because they are dependent upon the willingness of individuals to deconstruct the ideological foundations of colonialism that are deeply rooted in the land management structures it creates (Cantzler & Huynh, 2016). Because co-management, by its nature, cannot result in total sovereignty for Indigenous people, it's greatest contribution can be to deconstruct the elements which interrupt Indigenous relationship to their homelands and their bio-cultural sovereignty.

### *Implications for Decoloniality*

The failure of many co-management regimes to live up to the expectations placed upon them is related to the supposed promise of co-management as a decolonial process. If settler colonialism is predicated on the removal, subjugation, and erasure of

Indigenous inhabitants, then a process of reinstating, empowering, and healing Indigenous relationships *should* be a remedy for current settler constructs. At its heart, this work asks whether there is a process in which land management agencies, under the structure of a settler colonial government, can ever engage in decolonial land management practices. Examining the totality of the results shows that, while there may be advantages to co-management and it can be executed in a way that empowers Indigenous leadership, it is not akin to decolonization. Tuck and Yang, in their seminal work, *Decolonization is not a metaphor* (2012), remind us that attributing all anti-colonial struggles against imperialism to decolonization, waters down the concept and prevents its true realization. As they explain, the work of decolonization cannot be separated from the work of returning, not just Indigenous access, but Indigenous sovereignty in its entirety over land. As we are reminded, it is always about land. Decolonization requires that sovereignty over all land management is rematriated to Native peoples and not just temporarily deferred by a benevolent government agency (Tuck & Yang, 2012).

By virtue of seeking a process of “co” managing with settler governments, co-management is simply a process of sharing power between Indigenous people and the institutions historically responsible for their colonization and *does not* result in decolonization. However, I assert that the absence of true decolonization does not render the work of co-management meaningless. Tuck and Yang (2012) note that the work of settler harm reduction is still a valuable practice in that any tangible and material improvement to the conditions of Native people is a worthwhile endeavor. While the land may not be fully rematriated, if basketweavers are able to continue

gathering and sustaining their cultural practices, co-management regimes can still create value and harm can be reduced.

In addition to the possibility of reducing harm, I assert that co-management creates conditions in which the possibility of healing is nested. In the absence of full sovereignty, relationships between Indigenous peoples and their homelands can be restored in such a way that allows for healing. Even within the confines of settler land management regimes, subaltern connections to the land have been explored by environmental justice scholars for years (McKittrick, 2013). These connections are evident in the political ecology of healing described by Mortimer (2020). Through an exploration of the life of St. Kateri Tekakwitha, Mortimer (2020) illustrates this process of healing in which Indigenous women in Kaniatarowanenneh, also known as the St. Lawrence River region, preserve an unbroken relationship with the land without the detection of settler missionaries. Even in early moments of aggressive colonization, Indigenous people found ways to subvert attempts at assimilation and preserve their relationship with the land. This has allowed many cultural practices to evade the genocide and erasure that settler colonialism inflicts upon Indigenous peoples.

The results shown in this work do not paint a perfect picture of co-management. While there are many successful examples in which Indigenous people identified the partnerships as a success, there are also many examples in which those partnerships failed to interrupt harm or live up to their potential for positive development. However, with the lessons learned from the regimes studied in this research and the cultural shifts towards more anti-colonial land management regimes, there is greater possibility that co-management can succeed in future endeavors. Preservation of potential pathways

towards healing is one way that co-management can serve the goals of decolonization and anti-colonial praxis. When co-management provides opportunities for restoration of relationships and renewed ability to engage in cultural practices, the possibility of decolonization is closer to being realized. It is, therefore, worth the consideration and optimism on which all anti-colonial endeavors rely.

## **CONCLUSION:**

Returning again to the words of the basketweaver, I reflect on whether co-management is a viable pathway to improving homelands access for Indigenous people. As I have explored in the latter part of this thesis, this research suggests that co-management is both a viable and meaningful process for healing interrupted relationships between Indigenous people and their traditional homelands. Not without faults and complications, co-management should be approached with caution, respect, and nuance if land managers are to successfully engage with Tribal communities. Importantly, the expectations and promises of co-management should not be overstated. While it can create conditions for harm reduction of settler violence and vicious sedimentation, it is not a panacea for decolonization.

Advancing more effective co-management that enables healing and lays the groundwork for decoloniality, will require additional research and evaluation of co-management regimes must be done. Specifically, future research should return to previously evaluated cases to look at how the co-management regimes have fared long-term. This research should utilize a consistent evaluation framework, such as the metrics and analysis used in this study, for co-management regimes so that comparative assessments can be done.

The evaluation methodology used here can inform future research efforts by evaluating co-management based on its consideration of Tribal specific perspectives and priorities. In addition to evaluating co-management regimes for their impacts on Tribes, research should also make efforts to examine quantitative ecological outcomes. Given that motivations for co-management often stem from perceived ecological crises, demonstrating that co-management regimes are effective pathways for addressing these crises may increase the willingness of land managers to engage in co-management efforts.

*A closing reflection on land*

Another February has passed since my first conversation with the basketweaver in Mariposa. During the most recent workshop, I walked with her as she gathered weaving material and shared her thoughts on what it means for governing agencies to preserve “cultural landscapes.” As we talked, we were standing within one of these landscapes and looked out over what Tribal members and allied anthropologists have determined to be a village site that once housed 600 people .

In between personal stories of her life, the weaver would pause and pluck a perfectly straight stick out of a sourberry bush. She would spin it and examine its silhouette against the clouded sky before bundling it with the rest. These sticks were only straight enough for basketry because of the burning done by previous years workshops. That burning was only possible because of the presence, knowledge, and efforts of the 600 people who once resided on this land. As we talked, we walked through winding patches of sourberry that were scattered across the landscape. This

conversation, the baskets they'd make, the bushes they'd burn, were all reminders of the enduring legacy of the Indigenous relationship to land.

## LITERATURE CITED

- Anderson, K. (2005). *Tending the wild: Native American knowledge and the management of California's natural resources*. University of California Press.
- Anderson, M. K. (1999). The fire, pruning, and coppice management of temperate ecosystems for basketry material by California Indian Tribes. *Human Ecology*, 27(1), 35.
- Ashby, C. S. (1985). *Blackfeet Agreement of 1895 and Glacier National Park| A case history*. The University of Montana.
- Ayers, A. L., Kittinger, J. N., Imperial, M. T., & Vaughan, M. B. (2017). Making the transition to co-management governance arrangements in Hawai'i: A framework for understanding transaction and transformation costs. *International Journal of the Commons*, 11(1), 388. <https://doi.org/10.18352/ijc.709>
- Bacon, J. M. (2019). Settler colonialism as eco-social structure and the production of colonial ecological violence. *Environmental Sociology*, 5(1), 59–69. <https://doi.org/10.1080/23251042.2018.1474725>
- Baldy, C. R. (2013). Why we gather: Traditional gathering in native Northwest California and the future of bio-cultural sovereignty. *Ecological Processes*, 2(1), 17. <https://doi.org/10.1186/2192-1709-2-17>
- Baumflek, M., Cabe, T., Schelhas, J., & Dunlavey, M. (2022). Managing forests for culturally significant plants in traditional Cherokee homelands: Emerging platforms. *International Forestry Review*, 24(3), 298–314. <https://doi.org/10.1505/146554822835941841>
- Beam, A. (2022, March). “The Theft of Our Land” In Newsom’s \$100M Landback Proposal, Indigenous Advocates See Progress—And Have Questions. *KQED*.

<https://www.kqed.org/news/11908716/the-theft-of-our-land-in-newsoms-100m-landback-proposal-indigenous-advocates-see-progress-and-they-have-questions>

Berkes, F. (2009). Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. *Journal of Environmental Management*, 90(5), 1692–1702. <https://doi.org/10.1016/j.jenvman.2008.12.001>

Berkey, C., Costa, E., & Simon, A. (2021). *Revitalizing stewardship and use of tribal traditional territories: Options for improving california policy and law in state-managed lands and waters*. Berkey Williams, LLP.

Brock, S., Burow, P. B., & Dove, M. R. (2020). 17. Unsettling the Land: Indigeneity, Ontology, and Hybridity. In S. Mickey, M. E. Tucker, & J. Grim (Eds.), *Living Earth Community* (pp. 193–202). Open Book Publishers. <https://doi.org/10.11647/obp.0186.17>

Cadman, R., Snook, J., & Bailey, M. (2022). Ten years of Inuit co-management: Advancing research, resilience, and capacity in Nunatsiavut through fishery governance. *Regional Environmental Change*, 22(4), 127. <https://doi.org/10.1007/s10113-022-01983-3>

Cantzler, J. M., & Huynh, M. (2016). Native American Environmental Justice as Decolonization. *American Behavioral Scientist*, 60(2), 203–223. <https://doi.org/10.1177/0002764215607578>

Castro, A. P., & Nielsen, E. (2001). Indigenous people and co-management: Implications for conflict management. *Environmental Science & Policy*, 4(4–5), 229–239. [https://doi.org/10.1016/S1462-9011\(01\)00022-3](https://doi.org/10.1016/S1462-9011(01)00022-3)



- Cox, M., Arnold, G., & Villamayor Tomás, S. (2010). A Review of Design Principles for Community-based Natural Resource Management. *Ecology and Society*, 15(4), art38. <https://doi.org/10.5751/ES-03704-150438>
- Cronin, A. E., & Ostergren, D. M. (2007). Democracy, Participation, and Native American Tribes in Collaborative Watershed Management. *Society & Natural Resources*, 20(6), 527–542. <https://doi.org/10.1080/08941920701338059>
- Cronkleton, P., Pulhin, J., & Saigal, S. (2012). Co-management in community forestry: How the partial devolution of management rights creates challenges for forest communities. *Conservation and Society*, 10(2), 91. <https://doi.org/10.4103/0972-4923.97481>
- Day, S. (2014). The evolution of elite and societal norms pertaining to the emergence of federal-tribal co-management of natural resources. *Journal of Natural Resources Policy Research*, 6(4), 291–296. <https://doi.org/10.1080/19390459.2014.959263>
- Diver, S. (2016). Co-management as a Catalyst: Pathways to Post-colonial Forestry in the Klamath Basin, California. *Hum Ecol*, 14.
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., & Sutton, A. (2005). Synthesising qualitative and quantitative evidence: A review of possible methods. *Journal of Health Services Research & Policy*, 10(1).
- Dolan, D. V., & Middleton, B. R. (n.d.). Improving Tribal Collaboration in California's Integrated Regional Water Management Program. *NATURAL RESOURCES JOURNAL*, 55.

- Donoghue, E., Thompson, S., & Bliss, J. (2010). Tribal-Federal Collaboration in Resource Management. *Journal of Ecological Anthropology*, 14(1), 22–38.  
<https://doi.org/10.5038/2162-4593.14.1.2>
- Dunbar-Ortiz, R. (2014). *An indigenous peoples' history of the United States*. Beacon Press.
- Ebbin, S. A. (2004). The anatomy of conflict and the politics of identity in two cooperative salmon management regimes. *Policy Sciences*, 37(1), 71–87.  
<https://doi.org/10.1023/B:OLIC.0000035464.24471.89>
- Emenhiser, J. (2005). *The G-O Road Controversy: American Indian Religion and Public Land Politics*. Department of Politics, Cal Poly Humbolt.
- Exec. Order No.N-15-19. (2019). California State Governor's Office.
- Farrell, J., Burow, P. B., McConnell, K., Bayham, J., Whyte, K., & Koss, G. (2021). Effects of land dispossession and forced migration on Indigenous peoples in North America. *Science*, 374(6567), eabe4943.  
<https://doi.org/10.1126/science.abe4943>
- Glenn, E. N. (2015). Settler Colonialism as Structure: A Framework for Comparative Studies of U.S. Race and Gender Formation. *Sociology of Race and Ethnicity*, 1(1), 52–72. <https://doi.org/10.1177/2332649214560440>
- Goetze, T., C. (2021). *Empowered Co-Management: Towards Power-Sharing and Indigenous Rights in Clayoquot Sound, BC*.
- Goldstein, A. (2018). *By Force of Expectation\_ Colonization, Public Lands, and the Property Relation \_ UCLA Law Review.pdf*. <https://www.uclalawreview.org/by-force-of-expectation/>

- Goode, R., Fierro, M., Hankins, D., Johnson-Reyes, K., Middleton, B. R., Owl, R. T., Yonemura, R., Augustinez, A., Charley, D., Connolly, M., Fuller, R., Guerrero, M., Houck, D., Roy, R., Lucero, S., & Ganion, J. (2018). *Summary Report from Tribal and Indigenous Communities within California, California's Fourth Climate Change Assessment* (No. 4).
- Greer. (2019). Settler Colonialism and Empire in Early America. *The William and Mary Quarterly*, 76(3), 383. <https://doi.org/10.5309/willmaryquar.76.3.0383>
- Gusenbauer, M., & Haddaway, N. R. (2020). Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Research Synthesis Methods*, 11(2), 181–217. <https://doi.org/10.1002/jrsm.1378>
- Hazelhurst, S.-F. (n.d.). *AGREEMENT FOR SHARED STEWARDSHIP OF CALIFORNIA'S FOREST AND RANGELANDS Between the STATE OF CALIFORNIA And the USDA, FOREST SERVICE PACIFIC SOUTHWEST REGION.*
- Hill, R. (2011). Towards Equity in Indigenous Co-Management of Protected Areas: Cultural Planning by Miriuwung-Gajerrong People in the Kimberley, Western Australia: Miriuwung-Gajerrong Cultural Planning. *Geographical Research*, 49(1), 72–85. <https://doi.org/10.1111/j.1745-5871.2010.00669.x>
- Houde, N. (2007). The Six Faces of Traditional Ecological Knowledge: Challenges and Opportunities for Canadian Co-Management Arrangements. *Ecology and Society*, 12(2), art34. <https://doi.org/10.5751/ES-02270-120234>
- Intertribal Sinkyone Wilderness Council. (2021). The InterTribal Sinkyone Wilderness Council is restoring Indigenous guardianship to traditional Sinkyone lands and

- waters. *Protecting Tc'ih-Léh-Dûñ*.  
<https://www.savetheredwoods.org/blog/protecting-tcih-leh-dun/>
- Jentoft, S., McCay, B. J., & Wilson, C. (1998). Social theory and fisheries co-management. *Marine Policy*, 22(4), 423–436.
- Johnston-Dodds, K. (2002). *Early california laws and policies related to california indians*. California State Library, California Research Bureau.
- Kofinas, G. P. (2023). *Caribou Hunters and Researchers at the Co-management Interface: Emergent Dilemmas and the Dynamics of Legitimacy in Power Sharing*.
- Lame, G. (2019). Systematic Literature Reviews: An Introduction. *Proceedings of the Design Society: International Conference on Engineering Design*, 1(1), 1633–1642. <https://doi.org/10.1017/dsi.2019.169>
- Levine, A. S., & Richmond, L. S. (2014). Examining Enabling Conditions for Community-Based Fisheries Co-management: Comparing Efforts in Hawai'i and American Samoa. *Ecology and Society*, 19(1), art24. <https://doi.org/10.5751/ES-06191-190124>
- Lightfoot, K. G., Cuthrell, R. Q., Boone, C. M., Byrne, R., Chavez, A. S., Collins, L., Cowart, A., Evett, R. R., Fine, P. V. A., Gifford-Gonzalez, D., Hylkema, M. G., Lopez, V., Misiewicz, T. M., & Reid, R. E. B. (2013). Anthropogenic Burning on the Central California Coast in Late Holocene and Early Historical Times: Findings, Implications, and Future Directions. *California Archaeology*, 5(2), 371–390. <https://doi.org/10.1179/1947461X13Z.00000000020>

- Lillian Goldman Law Library. (2008). *The Avalon Project—Treaty With the Delawares 1778*. The Avalon Project - Documents in Law, History, and Diplomacy.  
[https://avalon.law.yale.edu/18th\\_century/del1778.asp](https://avalon.law.yale.edu/18th_century/del1778.asp)
- Long, J. W., & Lake, F. K. (2018). Escaping social-ecological traps through tribal stewardship on national forest lands in the Pacific Northwest, United States of America. *Ecology and Society*, 23(2), art10. <https://doi.org/10.5751/ES-10041-230210>
- Lopez, V. (2013). The Amah Mutsun Tribal Band: Reflections on Collaborative Archaeology. *California Archaeology*, 5(2), 221–223.  
<https://doi.org/10.1179/1947461X13Z.00000000012>
- Mabee, H. S., & Hoberg, G. (2006). Equal Partners? Assessing Co-management of Forest Resources in Clayoquot Sound. *Society & Natural Resources*, 19(10), 875–888. <https://doi.org/10.1080/08941920600901668>
- McKittrick, K. (2013). Plantation Futures. *Small Axe: A Caribbean Journal of Criticism*, 17(3), 1–15. <https://doi.org/10.1215/07990537-2378892>
- Middleton, B. R. (2011). *Trust in the land: New directions in tribal conservation*. University of Arizona Press.
- Middleton, B. R. (2015). Jahat Jatitotddom\*: Toward an indigenous political ecology. *International Handbook of Political Ecology*, 16.
- Miller, R. J., Ruru, J., Behrendt, L., & Lindberg, T. (2010). *Discovering Indigenous Lands*. Oxford University Press.  
<https://doi.org/10.1093/acprof:oso/9780199579815.001.0001>

- Mills, M., & Nie, M. (2020). *Bridges to a new era: A report on the past, present, and potential future of tribal co-management on federal public lands*. University of Montana.
- Mills, M., & Nie, M. (2022). Bridges to a New Era, Part 2: A Report on the Past, Present, and Potential Future of Tribal Co-Management on Federal Public Lands in Alaska. *COLUMBIA JOURNAL OF ENVIRONMENTAL LAW*, 46(S), 176–272.
- Mortimer, L. M. (2020). Kateri's Bones: Recovering an Indigenous Political Ecology of Healing along Kaniatarowanenneh, 1660–1701. *Native American and Indigenous Studies*, 7(2), 55. <https://doi.org/10.5749/natiindistudj.7.2.0055>
- Mulrennan, M. E., & Scott, C. H. (2023). *Co-management—An Attainable Partnership? Two Cases from James Bay, Northern Quebec and Torres Strait, Northern Queensland*.
- Murray, G., & King, L. (2012). First Nations Values in Protected Area Governance: Tla-o-qui-aht Tribal Parks and Pacific Rim National Park Reserve. *Human Ecology*, 40(3), 385–395. <https://doi.org/10.1007/s10745-012-9495-2>
- Nadasdy, P. (2005). The Anti-Politics of TEK: The Institutionalization of Co-Management Discourse and Practice. *Anthropologica*, 47(2). <https://www.jstor.org/stable/25606237>
- Neumann, R. P. (1992). Political ecology of wildlife conservation in the Mt. Meru area of Northeast Tanzania. *Land Degradation and Development*, 3(2), 85–98. <https://doi.org/10.1002/ldr.3400030203>
- Nie, M. (2023). *The Use of Co-Management and Protected Land-Use Designations to Protect Tribal Cultural Resources and Reserved Treaty Rights on Federal Lands*.

- Norgaard, K. M. (2019). *Salmon and Acorns Feed our people*. Rutgers University Press.
- Norton, J. (1979). *Genocide in northwestern California: When our worlds cried* (1st ed.). Indian Historian Press.
- Norton, J. (2014). If the Truth Be Told: Revising California History as a Moral Objective. *American Behavioral Scientist*, 58(1), 83–96.  
<https://doi.org/10.1177/0002764213495033>
- Notzke, C. (1995). A new perspective in aboriginal natural resource management: Co-management. *Geoforum*, 26(2), 187–209. [https://doi.org/10.1016/0016-7185\(95\)00019-H](https://doi.org/10.1016/0016-7185(95)00019-H)
- Notzke, C. (1999). Indigenous tourism development in the arctic. *Annals of Tourism Research*, 26(1), 55–76. [https://doi.org/10.1016/S0160-7383\(98\)00047-4](https://doi.org/10.1016/S0160-7383(98)00047-4)
- Office of the California Governor. (2020). *Statement of Administration Policy Native American Ancestral Lands*.
- Ohlson, D., Cushing, K., Trulio, L., & Leventhal, A. (2008). Advancing indigenous self-determination through endangered species protection: Idaho gray wolf recovery. *Environmental Science & Policy*, 11(5), 430–440.  
<https://doi.org/10.1016/j.envsci.2008.02.003>
- Okoli, C. (2015). A Guide to Conducting a Standalone Systematic Literature Review. *Communications of the Association for Information Systems*, 37.  
<https://doi.org/10.17705/1CAIS.03743>
- Ostler & Shoemaker. (2019). Settler Colonialism in Early American History: Introduction. *The William and Mary Quarterly*, 76(3), 361.  
<https://doi.org/10.5309/willmaryquar.76.3.0361>

- Padilla, E., & Kofinas, G. P. (2014a). Letting the leaders pass: Barriers to using traditional ecological knowledge in co-management as the basis of formal hunting regulations. *Ecology and Society*, 19(2), art7. <https://doi.org/10.5751/ES-05999-190207>
- Padilla, E., & Kofinas, G. P. (2014b). Letting the leaders pass: Barriers to using traditional ecological knowledge in co-management as the basis of formal hunting regulations. *Ecology and Society*, 19(2), art7. <https://doi.org/10.5751/ES-05999-190207>
- Phelan Hand, J. (2023). *Protecting the World's Largest Body of Fresh Water: The Often Overlooked Role of Indian Tribes' Co-Management of the Great Lakes*. 47.
- Pinel, S. L., & Pecos, J. (2012). Generating Co-Management at Kasha Katuwe Tent Rocks National Monument, New Mexico. *Environmental Management*, 49(3), 593–604. <https://doi.org/10.1007/s00267-012-9814-9>
- Plummer, R., & Fennell, D. (2007). Exploring co-management theory: Prospects for sociobiology and reciprocal altruism. *Journal of Environmental Management*, 85(4), 944–955. <https://doi.org/10.1016/j.jenvman.2006.11.003>
- Plummer, R., & Fitzgibbon, J. (2004). Co-management of Natural Resources: A Proposed Framework. *Environmental Management*, 33(6). <https://doi.org/10.1007/s00267-003-3038-y>
- Pomeroy, R. S. (1995). Community-based and co-management institutions for sustainable coastal fisheries management in Southeast Asia. *Ocean & Coastal Management*, 27(3), 143–162. [https://doi.org/10.1016/0964-5691\(95\)00042-9](https://doi.org/10.1016/0964-5691(95)00042-9)



- Pomeroy, R. S., & Berkes, F. (1997). Two to tango: The role of government in fisheries co-management. *Marine Policy*, 21(5), 465–480.  
[https://doi.org/10.1016/S0308-597X\(97\)00017-1](https://doi.org/10.1016/S0308-597X(97)00017-1)
- Raymond-Yakoubian, J., Raymond-Yakoubian, B., & Moncrieff, C. (2017). The incorporation of traditional knowledge into Alaska federal fisheries management. *Marine Policy*, 78, 132–142. <https://doi.org/10.1016/j.marpol.2016.12.024>
- Reed, D. K. (2020). *We Are a Part of the Land and the Land Is Us: Settler Colonialism, Genocide & Healing in California*. 23.
- Robbins, P. (2012). *Political ecology: A critical introduction* (2nd ed). J. Wiley & Sons.
- Ryan, E. (2015). THE PUBLIC TRUST DOCTRINE, PRIVATE WATER ALLOCATION, AND MONO LAKE: THE HISTORIC SAGA OF “NATIONAL AUDUBON SOCIETY V. SUPERIOR COURT.” *Environmental Law*, 45(2).
- Saha, R., & Hill-Hart, J. (2015). Chapter Five: Federal-Tribal Co-management of the National Bison Range. In *Mapping Indigenous Presence: North Scandinavian and North American Perspectives*. University of Arizona Press.
- Sanders, M. (n.d.). *ECOSYSTEM CO-MANAGEMENT AGREEMENTS: A STUDY OF NATION BUILDING OR A LESSON ON EROSION OF TRIBAL SOVEREIGNTY?*
- Sen, S., & Nielsen, J. R. (1996). Fisheries co-management: A comparative analysis. *Marine Policy*, 20(5), 405–418.
- Simpson, L. B. (2014). *Land as pedagogy: Nishnaabeg intelligence and rebellious transformation*. 25.
- Spaeder, J. J. (2005). Co-management in a Landscape of Resistance: The Political Ecology of Wildlife Management in Western Alaska. *Anthropologica*, 47(2), 165–178.

- Spaeder, J. J., & Feit, H. A. (2005). Co-management and Indigenous Communities: Barriers and Bridges to Decentralized Resource Management: Introduction. *Anthropologica*, 47(2), 147. <https://doi.org/10.2307/25606232>
- Spak, S. (2005). The Position of Indigenous Knowledge in Canadian Co-management Organizations. *Anthropologica*, 47(2). <https://www.jstor.org/stable/25606238>
- Spence, M. D. (2000). *Dispossessing the wilderness: Indian removal and the making of the national parks*. Oxford Univ. Press.
- Stevenson, M. G. (2006). The Possibility of Difference: Rethinking Co-management. *Human Organization*, 65(2), 167–180. <https://doi.org/10.17730/humo.65.2.b2dm8thgb7wa4m53>
- Strengthening Tribal Consultations and Nation-to-Nation Relationships: A USDA Forest Service Action Plan* (FS-1211; Forest Service Action Plan). (2023). US Department of Agriculture.
- The Treaty Era (1778–1820)—A Brief History of Civil Rights in the United States*. (n.d.). USL Library at Howard University School of Law. <https://library.law.howard.edu/civilrightshistory/indigenous/treaty>
- Tipa, G., & Welch, R. (2006). Co-management of Natural Resources: Issues of Definition From an Indigenous Community Perspective. *The Journal of Applied Behavioral Science*, 42(3), 373–391. <https://doi.org/10.1177/0021886306287738>
- TsoSIE, R. (2007). *INDIGENOUS PEOPLE AND ENVIRONMENTAL JUSTICE: THE IMPACT OF CLIMATE CHANGE*. 78, 55.
- Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, 1(1).

- US House of Representatives. (2022, June 16). *Chair Grijalva, Sen. Heinrich Introduce Two Bills to Elevate the Role of Tribal Nations, Protect Tribal Cultural Sites in Public Land Management [Press Release]*. Natural Resources Committee.  
<https://democrats-naturalresources.house.gov/media/press-releases/chair-grijalva-sen-heinrich-introduce-two-bills-to-elevate-the-role-of-tribal-nations-protect-tribal-cultural-sites-in-public-land-management>
- Vargas-Hernandez, J. G. (2012). *INDIGENOUS POLITICAL ECOLOGY APPROACH TO SOCIAL MOVEMENTS IN MEXICO AND LATIN AMERICA*. 1, 18.
- Vaughan, M. B., & Caldwell, M. R. (2015). Hana Pa'a: Challenges and lessons for early phases of co-management. *Marine Policy*, 62, 51–62.  
<https://doi.org/10.1016/j.marpol.2015.07.005>
- Vinyeta, K. (2021). Under the guise of science: How the US Forest Service deployed settler colonial and racist logics to advance an unsubstantiated fire suppression agenda. *Environmental Sociology*, 1–15.  
<https://doi.org/10.1080/23251042.2021.1987608>
- Vinyeta, K., & Lynn, K. (2015). *Strengthening the Federal-Tribal Relationship: A Report on Monitoring Consultation under the Northwest Forest Plan* (Northwest Forest Plan - The First 20 Years). US Department of Agriculture.
- Walker, C. R. (2014). *Piyahu Nadu—Land of Flowing Waters: The Water Transfer from Owens Valley to Los Angeles 1913-1939*.  
<https://escholarship.org/uc/item/87j2s68k>
- Washburn, K., K. (2022). Facilitating Tribal Co-Management of Federal Public Lands. *Wisconsin Law Review*, 2, 263–328.

- Watson, A. (2013). Misunderstanding the “Nature” of Co-Management: A Geography of Regulatory Science and Indigenous Knowledges (IK). *Environmental Management*, 52(5), 1085–1102. <https://doi.org/10.1007/s00267-013-0111-z>
- Whyte, K. (n.d.). *Anti-colonial action through kinship*. 13.
- Whyte, K. (2018). Settler Colonialism, Ecology, and Environmental Injustice. *Environment and Society*, 9(1), 125–144. <https://doi.org/10.3167/ares.2018.090109>
- Whyte, K. P. (2011). The Recognition Dimensions of Environmental Justice in Indian Country. *Environmental Justice*, 4(4), 199–205. <https://doi.org/10.1089/env.2011.0036>
- Wilkinson, B., & Sahara, A. (2022). Community management of Native American, municipal, and private managed forests in northern California, USA. In J. Bulkan, J. Palmer, A. M. Larson, & M. Hopley, *Routledge Handbook of Community Forestry* (1st ed., pp. 200–218). Routledge. <https://doi.org/10.4324/9780367488710-16>
- Wilson, P. I. (2002). Native Peoples and the Management of Natural Resources in the Pacific Northwest: A Comparative Assessment. *American Review of Canadian Studies*, 32(3), 397–414. <https://doi.org/10.1080/02722010209481668>
- Witgen. (2019). A Nation of Settlers: The Early American Republic and the Colonization of the Northwest Territory. *The William and Mary Quarterly*, 76(3), 391. <https://doi.org/10.5309/willmaryquar.76.3.0391>
- Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, 8(4), 387–409. <https://doi.org/10.1080/14623520601056240>

Youdelis, M., Townsend, J., Bhattacharyya, J., Moola, F., & Fobister, J. B. (2021).

Decolonial conservation: Establishing Indigenous Protected Areas for future generations in the face of extractive capitalism. *Journal of Political Ecology*, 28(1). <https://doi.org/10.2458/jpe.4716>