Exploring Ecological Healing in a Settler Colonial Context: The Elwha River and Moses Prairie Restoration Projects

by

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**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter 1: The Elwha River Restoration Project</td>
<td>21</td>
</tr>
<tr>
<td>Chapter 2: The Moses Prairie Restoration Project</td>
<td>64</td>
</tr>
<tr>
<td>Conclusion: Towards a Decolonizing Ecological Restoration Praxis</td>
<td>96</td>
</tr>
<tr>
<td>Works Cited</td>
<td>119</td>
</tr>
</tbody>
</table>
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**PREFACE**

I came to my thesis topic through my involvement with the Doris Duke Conservation Scholars Program at the University of Washington (DDCSP). Through this amazing program, I had the opportunity to interact with the Elwha River and Moses Prairie Restoration projects during the summers of 2016 and 2017.

Responding to the profound lack of diversity in environmental conservation work, DDCSP aims to change the face, practice, and future of conservation through experiential learning and working in Washington State. As one of 20 scholars from diverse racial, socio-economic, and ideological backgrounds, I was thrown into two years of “conservation conversations” with awe-inspiring people whom I am incredibly fortunate to know. Many of our identities are not represented in the conservation field and we observed too many professionals who were not only clueless about the communities they (supposedly) served, but actively reproduced harmful ideas about whose interests really matter in environmentalism by advancing wealthy, white, and Western perspectives. In response to these disappointing and often upsetting interactions, my fellow scholars and I tried to collaboratively figure out how to do “good” environmental work, grounded in the interests of communities and aligned with anti-oppression ideals.

Ultimately, this thesis is a personal effort to consider how to practice inclusive environmental conservation, while simultaneously recognizing the role that non-Indigenous peoples and minorities play in supporting the structures of settler-colonialism. As a non-Indigenous person, I recognize that I carry settler privilege in
my interactions with place, even as a minority in the environmental field. In this thesis, I aim to acknowledge and include Indigenous knowledge and perspectives that have been virtually ignored within environmental studies and science studies, but in non-determined ways that do not stereotype Indigenous knowledge or identities. Moreover, I do not claim to speak for Indigenous peoples, but rather, seek to analyze the broader systems operating within restoration projects that involve Indigenous peoples.

As a mixed-Korean American woman from California writing about what ecological restoration means in a settler-colonial context in Washington, I recognize the limitation that my being an outsider brings to my analysis. In a just world, marginalized people deserve to cultivate belongings and relationships in place and Indigenous peoples deserve the repatriation of their ancestral land. The question is how we work towards both ideals as we try to find better ways to exist with one another.
INTRODUCTION

“If it is the path that makes the garden,
And the garden that civilizes the wild,
We are disengardening now,
Turning on our past and our pioneering ways to make amends for the scythe that went too far,
To say a thank you audaciously for the future.”

This past summer, I worked as an intern on the Olympic National Park Elwha Revegetation Project, part of the larger Elwha River Restoration Project. My field partner Lydia and I spent our days surveying established experimental plots in the area where the Glines Canyon Dam and Lake Mills once blocked the flow of the Elwha River, until 2014 when the last chunks of concrete were moved out of the river’s way. Our job was to assess the success of direct planting and seeding done by the Olympic National Park Elwha Revegetation team. On some days we worked at the native plant nursery, where volunteers and park staff have labored for the last 10 years propagating seeds from native plant species to be seeded in the former reservoirs. Once the human-made lakes were drained, the area became barren ground: a hostile, moonscape environment completely devoid of nutrients and shade that fragile young plants struggled to grow upon. Over the course of my six-week internship, measuring, watering, transplanting, and identifying plants, I found myself

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2 Dedicated volunteers and staff have helped to propagate 322,049 native plants and sow over 6,360 pounds of seed in the drained reservoirs to facilitate secondary forest succession.
deeply invested in the Elwha River Valley. I was in awe of the changes afoot, inspired by how important even the smallest plants are to bringing a whole river system back to health.

I sensed a similar resilience when I stepped onto Moses Prairie, two hours south of the Elwha River on the western coast of Washington’s Olympic Peninsula. Just one year prior, the same ground I was standing on had been engulfed in controlled flames – the first burn conducted on the Quinault Indian Nation lands in 200 years. As I looked out across the vast prairie, protected once again from encroaching forest, new shrubs were blowing in the July wind. Witnessing the results of such a radical project— one to relearn and remember while adapting to build new futures – I was struck by the poetic idea of burning away overgrown layers to once again allow room for growth.

To me, the free-flowing Elwha, the open prairie, and all of the baby plants facilitating ecosystem function evoked a deeper meaning than simply returning things to a functioning, status quo. They represented the prospect of flourishing after devastation, a deeply affecting sentiment that many environmentalists point to as the reason they keep on carrying on. If I felt so touched and moved, how must those who had worked on the projects since their inceptions feel, seeing change enacted?

The process of restoring anything begins with reckoning with the extent of the damage that has been done. There is the loss that is visible, found with clear cuts and human settlements being swallowed by sea level rise, alongside the invisible loss of processes that have been altered beyond repair, such as the changing nutrient composition in plants as they adapt to higher concentrations of atmospheric carbon
dioxide or waterways that are deceivingly toxic. The loss is great, but so too are the efforts to resist that loss and attempt to reverse it. There is an inherent hopefulness to the idea of “righting a past wrong,” and a beauty in seeing that some of the actions taken after environmental trauma can lead to tangible improvements. I certainly felt it in my experience working on and visiting these two restoration projects. Knowing what a place was, what happened to it, and the dedication people have put into restoring it only adds to the immense meaning of seeing it rebound, respond, or resurge.

Nevertheless, the idea of ecological restoration in the United States is complicated by the fact that the devastated land now being rehabilitated was originally stolen. The Indigenous peoples of the United States have long and ongoing— but ever silenced— histories of oppression, violence, dispossession, and cultural genocide at the hands of the settler colonial state. The relationships people hold to places are still entrenched within historical and contemporary systems of oppression. Consequently, the ethics of “healing” and the meanings of ecological restoration are far from straightforward.

This thesis aims to consider what exactly we are restoring in ecological restoration projects in the United States, and what these places become through restoration. Restore to what? Restore for whom? What forces determine how restoration sites will change in the years to come? What relationships to place are being renegotiated, re-engaged, and reconsidered through restoration? With the constellation of settler colonial histories, logics, and structures, how are we to understand what it means to restore something like a river or a prairie?
A Background on Making Place: Science and Technology Studies Literature Review

By necessity, this thesis is borne out of several academic fields, namely environmental studies, feminist materialist science studies, settler colonialism studies, and anthropology. More significantly, this thesis is responding to a lack of literature in these fields analyzing ecological restoration as a social and cultural practice.

My methodology builds specifically upon the work of “postcolonial” critiques of science done by “new feminist materialists,” such as Deboleena Roy and Banu Subramaniam, whose work aims to develop an account of materiality that is “simultaneously an account of power and privilege.”3 Scholars in this arena of science studies have sought “to trace and make partly visible the ontological, epistemological and methodological assumptions and frameworks”4 operating in our understandings of the more-than-human world, beginning with the woman’s body and extending to considerations of the subject/object dynamic.5

Problematising the passive-nature and active-culture dualism has been a core feature of prominent science studies texts for the past twenty years. Scholars like Donna Haraway and Karen Barad suggest that those studying epistemologies and ontologies must recognize how subject/object binaries affirm and reproduce harmful hierarchies of being in the world that reify and justify unjust power dynamics.6 The construction of nature as an object separate from the human subject has allowed for

4 Ibid., 24.
certain ways of knowing the world to be privileged over others. Within Donna Haraway’s concept of natureculture, nature is understood to be “a concept, an idea, a [material] place, that is co-produced through the interactions and entanglements of various organisms, histories, and geographies,” such that our worlds and their meanings, come into being through mutual constitution via entanglements. Place is not inert, but rather something that acts upon and reacts in relation to various actors. Because the social and ecological systems have co-evolved, materiality should be understood as a process rather than a product. Therefore, as situated within local contexts of larger power systems and networks “matter makes, is made, and remade.”

In other words, place is constituted by the confluence and conflict of interactions, narratives, and relationships. For instance, consider the construction of a forest: a forest can be a site of leisure, where one walks through the trees for exercise; it can be a site where animals are hunted for consumption, by humans or other animals; it can be a site for labor, where people assess and remove trees based on complex knowledges of timber harvest; it can be a site of spirituality in which one is inextricably imbricated with other species; it can be a site of learning, by gathering leaves to see their shapes or by measuring carbon storage using allometric equations; and it can be site for remembering, of the trees that once stood, the bird’s nest that once perched, or the clearing where a family once lived. Indeed, there are many other

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ways place is co-constituted, especially when considering the dynamic and shifting roles these interactions have over time.

Regardless of the cultural meanings we inherit or come to associate with a given place, the worlds we inhabit are never fixed in identity or meaning, but are “always places in the making, where the identities, histories, struggles, and hopes of human and more-than-human converge”. By diffusing agency between human and more-than-human actors, the environment can exist as is or on its own terms, beyond the conventional anthropocentric lens employed in environmental studies. In order to look at these relationships as they bring about a given place, Melissa Poe et al. suggest a framework of places as “relational ecologies of belonging.” They define this as, “the interactive and networked aspects of the ways that relationships between people, place, and more-than-human nature are formed, legitimated, and mobilized in discursive and material ways.” Diffusing the presence of agency in the production of nature, including its material and discursive forms, aims to consider more ethical ways of understanding the world:

Tending to the flows of material life, not as fixed or finished products, but as processes of becoming through relationships with the material world reframes agency as not simply the capacity for individual, willful action, but rather as the capacity for ‘response/ability’: the ability to affect and be affected by others.

The meanings ascribed to a place by scientists, visitors, or project managers must then contend with other emerging or existing meanings in a place’s ongoing

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10 Ibid.
11 Ibid.
processes of becoming. As Poe et al. suggest, places are the sum products of conflicting narratives and desires:

Nature areas are not just static institutional spaces with land managers merely enacting planting, restoration, and ideologically rooted conservation practices. Rather they are always places in the making, where the identities, histories, struggles, and hopes of human and more-than-human converge.\textsuperscript{12}

Place, then, is a complex concept grounded in divergent understandings of belonging and identity. The question of who “belongs” in a given place is often organized around oppressive logics that justify the exclusion of certain bodies in space. Knowing where you belong in the world is powerful in determining how you can inhabit and interact with place. As Colleen Boyd argues: a sense of belonging “legitimates cultural authority and weaves individuals into the intimate web of daily life. To know where you are from evokes more than membership; it signifies and legitimates one’s claim to a specific historic, cultural and physical geography.”\textsuperscript{13}

Moreover, a “claiming” of a place, or what also may be considered one’s positionality, informs how you move through the world. Rebecca Solnit suggests that knowing where you are necessitates this reflexivity about where you are coming from:

New or old, it seems you should know where you came from to understand where you are, and only a true and absolute amnesiac could come from nowhere in arriving somewhere. We all carry the burden of history and desire; sometimes it’s good to sit down and open the suitcases.\textsuperscript{14}

\textsuperscript{12} Ibid., 906.
The relationships that constitute place are subject to the same systems that
govern and control social life. Consider the creation of national parks and the role of
the United States National Park Service (NPS): to establish non-human use areas for
the American public, the federal government had to expel the Indigenous people who
lived on the land and held established relationships with the ecologies of the area.15

Following the displacement of Indigenous peoples, the NPS reshaped these spaces for
the purposes of leisure and recreation, specifically for middle-upper class white
families interested in preservation. Consequently, the lifeways of the Indigenous
peoples of the area were restricted and forbidden from the confines of the established
parks. Preserved within a “look, but don’t touch” logic, these places were
reconfigured into “something that is not ourselves and does not include us.”16

The relationships we prioritize and condemn are located in local histories of
place, but the gaps between the material environment and the human histories are
often hard to conceptualize or conceive of in practice. As Solnit writes,

> It seems odd that natural and historical time should flow side by side, and so
little affect each other, that the water should float down like smoke regardless of
whether Yosemite was an indigenous homeland, a battleground, or a tourist
attraction, and that a place that had changed so profoundly in so little time should
possess so many constants.17

> Just as humans embody certain histories, so too do environments. Embodied
practices are not only physically but also historically located- “enabled differently in
the context of different technologies, social relations, and interactions with the more-

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15 William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong
16 Solnit, Savage Dreams, 263.
17 Ibid., 230.
than-human world.”\textsuperscript{18} When we hold this as true for human relationships to place, it “becomes possible to investigate the specific physical and historical conditions in which these practices unfold, and unfold in relation to one another.”\textsuperscript{19} In creating the discursive space necessary for navigating the complex and contradicting narratives of place, we can consider more critically analyze the management logics applied to them.

**Place and Settler Colonialism**

Understanding place and its contested meanings in the United States requires reckoning with the reality of our existence within in a settler colonial state. There can be no singular definition of settler colonialism because it takes different shapes dependent upon historical particularities. But at its core, “territoriality is settler colonialism’s specific, irreducible element.”\textsuperscript{20} As Patrick Wolfe outlines in his theoretical considerations of how settler colonialism works, settlers want Indigenous land, but not Indigenous peoples; therefore, the indigenous peoples who occupy valuable land must be eradicated.\textsuperscript{21} This phenomenon is what Wolfe calls the logic of elimination, which “in its specificity to settler colonialism, is premised on the securing—the obtaining and the maintaining—of territory. This logic certainly requires the elimination of the owners of that territory, but not in any particular


\textsuperscript{19} Ibid.


\textsuperscript{21} Ibid.
Indeed, settler colonialism “destroys to replace,” with the complete dominance of the settler state as the end goal, facilitated by a variety of means. Because it is both a complex social formation as well as continuous through time, settler colonialism should be understood as “a structure rather than an event.”

If settler colonialism seeks to ultimately extinguish the settler-colonial relation by eliminating Indigenous peoples, the struggle against settler colonialism “must aim to keep the settler-Indigenous relationship ongoing” by affirming Indigenous peoples’ continuity in place, including rights to land as recognized by the settler state. As Lorenzo Veracini notes, “if colonialism ends with the colonizer’s departure, settler colonialism ends with an indigenous ultimate permanence,” or the realization that settler society cannot ever neutralize, eradicate, or control Indigenous being and becomings. Central to this framework is that “land is life—or, at least, land is necessary” for Indigenous life in a settler colonial context. When considered alongside the efforts on the part of settler colonialism to “cover its tracks” by articulating the non-existence or vanishing of Indigenous peoples, “contests for land can be—indeed, often are—contests for life.”

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22 Ibid., 407.
23 Ibid., 388.
24 Ibid., 390.
26 As Lorenzo Veracini suggests, settler colonial states justify their continued existence by refusing to recognize themselves as such. This is done through continually disavowing history, Indigenous peoples’ resistance to settlement, Indigenous peoples’ claims to stolen land, and the ongoing structure of settler colonialism. Settler colonialism is made invisible within settler societies, through the use of institutional apparatuses to “cover its tracks.”
27 Wolfe, "Settler Colonialism and the Elimination of the Native," 1.
Thinking about place through a lens that accounts for histories of use and displacement along axes of settler colonialism is important. Yet, this lens is seldom used by those working to protect ecosystems or the environment. This is reflective of the fact that mainstream environmentalism remains a majority white space, with very few Indigenous voices operating in positions of power. While attending to these histories may not seem like the most relevant concern to those engaged in the material practices of removing a dam or planting more trees, foregrounding Indigenous existence in place is an imperative to avoid the hegemonic consequences of backgrounding particularities of place. Again, the insidious part of the settler colonial project is to “make places into mere passive instruments or neutral surfaces for the inscription of [settler] projects,” removing Indigenous peoples and their relationships in place from the picture.²⁸

As Kyle Powys Whyte suggests, the ecological upheaval of climate change threatening Indigenous communities is another iteration of the environmental change experienced by Indigenous peoples resulting from dispossession of lands and forced migration.²⁹ In the disruption of ecologies for settler progress, settler colonialism is a multispecies project that involves the introduction, displacement, and settlement of more than human agents, including plants and animals.³⁰ Attending to the historical

contingency of ecological upheaval and settler colonialism demonstrates why Indigenous peoples’ political self-determination is necessarily “often centered on protecting intergenerational systems of place-based relationships from being obstructed by globalization and other political, social, and economic forces.”

The Relevance of Restoration

Thinking through how the restored landscape is produced via historical and ongoing entanglements with settler society and Indigenous peoples in the United States is an important process that must be incorporated into environmental practice. This begins first with acknowledging that the environment is not an entity that exists merely for inscription of meaning by human actors, as science studies scholars have demonstrated. When we consider how place is co-constituted materially and semiotically through affecting and being affected by others, the actual act of restoring an environment becomes far more meaningful and impactful. Indeed, every time an ecosystem is restored, a particular kind of nature is being realized and expressed. Restoration practitioners make active decisions about what they want a given ecosystem to become and these decisions ultimately matter.

Broadly, restoration is defined as “the action of returning something to a former owner, place, or condition.” In this thesis, I look specifically to ecological restoration as a site for analysis because of its unique position as a field in which humans seek to alter landscapes as a way to address past wrongdoings that resulted in environmental degradation. Ecological restoration is a relatively new field, having

grown to prominence in the 1970s along with the Western environmental movement. The Society for Ecological Restoration (SER), founded in 1987, is a global network of restoration professionals that works “to advance the science and practice of ecological restoration for the benefit of biodiversity, ecosystems, and humans.”

SER’s earliest definition of ecological restoration describes it as “the process of intentionally altering a site to establish a defined, Indigenous, historic ecosystem. The goal of this process is to emulate the structure, function, diversity and dynamics of the specified ecosystem.”

SER’s more recent definition avoids pledging complete fidelity to historical ecosystems, having seen the limitations of defining a practice by attempts to recreate the past: “Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.”

Restoration ecology, or “the suite of scientific practices that constitute an emergent sub-discipline of ecology,” is the scientific knowledge system that provides the theoretical underpinnings employed throughout the broader field of ecological restoration. The guiding notion of restoration ecology used to be the climax model, which posited that a balanced or final state of an ecosystem could be described and then emulated on the land. Biotic systems, however, rarely stick to the simple trend of climax, disturbance, recovery, and climax once again. This has lead to a greater

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emphasis in the field on restoring ecosystem functions rather than a specific ecosystem types. This model pushes to “meet the implicit demands, patterns, and character of ecosystems,” suggesting that restoration practitioners are designing for the “silent interests of ecosystems.” Throughout this thesis, I refer to restoration ecology and other scientific knowledge systems informing the practices of ecological restoration and land management as Western Ecological Scientific Knowledge (WESK).

Restoring an ecosystem to a state of recovery necessitates thinking through restoration as a process, as ecosystems are dynamic entities that change over time. As Eric Higgs argues, restoration is a “process of transition, a continuous coming into being of an ecosystem.” Still, restoration projects often revolve around tangible, specific goals that the practitioners want to be achieved at some point in the place’s future. In this sense, ecological restoration brings about a unique fission of temporalities: the processes are dually grounded in the past and the future, as an ecosystem’s complex pasts must be considered and navigated alongside the futures that humans want to create and build. Within most ecological restoration projects, scientists and project managers work to restore a degraded ecosystem to a set of prior conditions, or a historic “baseline.” A baseline is an arbitrarily chosen reference point that describes an ecosystem at peak diversity and functional productivity, often located in time prior to European colonization, a tendency that will be critiqued at length in my analysis.

39 Ibid., 110-11.
Further complicating the meanings of ecological restoration practice are the discursive tools used to describe the work and the assumptions that “restoring” holds to be true. The rhetoric used in ecological restoration projects likens the process of restoration to a kind of healing. This language assumes that, following ecological degradation, certain aspects of the landscape, be they systems or species, can be brought back to a degree of health through intentional human intervention. In this sense, ecological restoration practitioners tend to see humans as the primary actors actively constituting landscapes: a certain degree of resilience is expected from an ecosystem’s assemblages by the people on the projects. Nevertheless, as ethnographer Anna Tsing suggests in her discussion of forests, resurgence is necessarily a multi-species endeavor and it is not only relationships between human groups that we must consider:

The cross-species relations that make forests possible are renewed in the regrowing forest. Resurgence is the work of many organisms, negotiating across differences, to forge assemblages of multispecies livability in the midst of disturbance. Humans cannot continue their livelihoods without it.  

The philosophical underpinnings of ecological restoration have already been explored at length in other works, but the limitations of most of these texts are that they tend to 1) only consider Western frameworks, 2) focus primarily upon white environmentalist experiences in environment, and 3) reproduce nature-culture dualisms. Recent works have begun arguing that ecological restoration requires attention beyond the scientific realm, into the social sphere, considering elements like a region’s land use histories to inform contemporary restoration practices, suggesting

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41 See Higgs (2003), Hall (2005), and Hordequin (2013)
that restoring ecosystems is “as much about the retrieval of beliefs and practices as it is about the regaining of physical conditions.”42 Still, even in texts that are conscious of the imbrication of humans in the environment, very few explicitly discuss the multifaceted roles that Indigenous peoples play in the environment. Those that do still locate Indigenous peoples in the past, proposing place-based pedagogies or land ethics that fail to address ongoing injustices of settler-colonialism or contemporary Indigenous communities.43

Attending to the Practice of Tending

In keeping with science studies texts, I argue that restoration practices and interventions into the land should be understood as technologies that support and extend particular knowledge systems and ways of being in the world. Ecological restoration practices often operate in ways that reify power dynamics, but this often goes unaddressed because of how they operate in a liminal space between a wrongful past and a better future. It is, however, crucial to critique how we act in this liminal space because our actions in the present moment both inflect the past and are deterministic of the future. Indeed, practicing ecological restoration is a chance to revisit injustice and the wrongs of settler colonialism and perhaps intervene in ways that unsettle them.

Some may ask if discussing the ‘meanings’ and ‘limitations’ of ecological restoration as it is currently being practiced is worth anyone’s time, especially when considering the widespread assault on environmental protections by the current

43 See Tuck *et al.* (2014) for a more thorough critique of non-Indigenous environmental land pedagogies.
political administration. I argue that it is all the more important now, in a moment of profound crisis in the mainstream environmental movement and amidst continuing assaults on Indigenous rights to sovereignty and self-determination, to not only think through these issues of land, history, and repair in our management of the environment, but also our advocacy.

Given that ecological restoration is predicated on recognizing that our past practices were wrong, I argue that we should apply the same rigorous analysis of the methods and practices we employ in restoring. In this thesis I strive to show how conflicting narratives of place inform what happens in ecological restoration and how historical relationships to place are implicitly reproduced without awareness. In the micropolitics of projects’ management and execution, this issue manifests in persisting settler colonial logics, namely the prioritization of Western Ecological Scientific Knowledge and the continued discursive separation of Indigenous peoples and culture from settler society and the modernity. To illuminate these ignored dynamics, I suggest that ecological restoration practice needs to be situated in the larger narrative contexts of the places we are attempting to heal.

Chapter Outline

Most writings analyzing ecological restoration from a social perspective have looked at projects during the planning phases or right as they were beginning.44 Virtually none have looked at case studies that have been officially “completed,” or when funding for direct labor has run dry. I see these “recently-finished” projects as particularly ripe for analysis because, at this point in a project’s timeline, there is

44 See Crane (2012), Mapes (2013)
space for retrospective analysis. Moreover, practitioners’ expectations and hopes for
the future are informed by preliminary results or responses from the landscape, which
may align with or diverge from initial optimistic hopes in fascinating ways. My
methodology consists of historical research, analysis of primary and secondary
restoration ecology literature concerning my two case studies, self-conducted
interviews, and my own personal observations gathered from working on the Elwha
Revegetation project and spending extensive time with the members of the Quinault
Division of Natural Resources over the course of the summer of 2017.

The first chapter of my thesis is dedicated to the Elwha River Restoration
Project, a dam removal and salmon restoration project with the bold goal of restoring
a river ecosystem to pre-dam conditions. By 2014, the Elwha and Glines Canyon
dams were fully removed from the Elwha River after blocking salmon passage for a
century. The dam removal was lauded and celebrated by many as an unprecedented
win for rivers, salmon, and federally-recognized Native American tribes’ rights to
protect and manage their ancestral lands. Still, in a project co-managed by the Lower
Elwha Klallam tribe and Olympic National Park, tensions are illustrative of a long
history of uneven power dynamics in place. What is there to be learned from an
imperfect partnership, responding to a century’s worth of ecological damage to a
beloved river?

In my second chapter, I turn my attention away from river and dams towards
fire and prairies. The Moses Prairie Restoration Project is a particularly unique
ecological restoration project in that the project’s stated goal is to restore a “cultural
ecosystem” through the reintroduction of anthropogenic burning to one of the
Quinault Indian Nation’s historic prairies. Systems like Moses Prairie are the product of long-established land management practices by the Indigenous peoples of the Pacific Northwest. What does it mean to explicitly restore a people’s place in ecosystem?

I look at these two case studies to consider how these projects make place through practice and what these places in turn do: What is actually being restored in these projects? How are these relationships in place informed simultaneously by settler-colonial structures and histories, as well as Indigenous resistance and resurgence? I argue that in attending to the complexities of these stories of practiced restoration, we are opening up a new space for critical, reflexive analysis of restoration practice.

Manifesting the possibilities of these restoration projects relies upon us actively engaging the contradicting, complex, and ever-shifting narratives of place enacted and grounded in the materiality of river floodplains and prairies. In some ways, these chapters feel to me like an ethical responsibility, to make visible the perspectives and relationships to place long ignored by structures of oppression governing how certain bodies are allowed to move through space and bring worlds into being. As Joyce Lecompte says, “if we change our understandings… by making the invisible visible, perhaps we can change our present and the future as well.”

The aim of this analysis is to open a space to think creatively about how we might more responsibly and practically inhabit and intervene in our naturecultural

worlds. The struggle to compose a “good common world,” including the use of science and technologies to do so, is inherently a political one.\textsuperscript{46} In denying the hegemony of the dominant narratives of land, this thesis suggests that we can pursue more radical relationships in place through a decolonizing ecological restoration praxis.

\textsuperscript{46} Ibid., 238.
CHAPTER 1: The Elwha River Restoration Project

The Elwha River Restoration Project is the largest dam removal ever attempted and, behind the restoration of the Everglades, the second largest restoration project in United States history. In 2009, almost 20 years after the passage of the 1992 Elwha Restoration Act, crews hired by Olympic National Park (ONP) and the Lower Elwha Klallam Tribe (LEKT) began to break apart the two hydroelectric dams on the Elwha River: the Elwha Dam (built in 1912) and the Glines Canyon Dam (built in 1926). Lake Aldwell and Lake Mills, the reservoirs behind the dams, were drained.

As of the summer of 2017, the Elwha River Valley looks different to the eye. Though the dams are gone, the extent of their impact is still visible in the landscape. The reservoirs were fully drained in 2011 but have left a kind of footprint: immediately noticeable on first glance is the drastic gap between tall deciduous old growth forest and the newer growth of successional species on the valley wall. The old growth forest, shaded with deep evergreen hues, is dense with a vast presence. The six-year-old forest is a lighter green and is filled with gaps in its growth, but still impressively lush for its youth. When standing on the concrete towers of the Glines Canyon Dam, now an informational, visitor lookout point, one can see the icy-blue Elwha River weave over the barren floodplain. The gray “terraces” of the reservoir valley, formed from deposited sediment that accumulated behind the Glines Canyon Dam for over 85 years, looks nothing short of desolate from afar. But still, there are

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1 See Figure 1
already small clumps of vegetation popping up from this veritable moonscape. Some of these plants grew there “naturally,” by way of wind dispersal of seeds from the surrounding edge of old growth forest. Much of the growth, though, is the result of direct planting and seeding done by dedicated restoration practitioners.

Figure 1. Aerial image of Lake Mills post dam removal, with the floodplain framed by light green secondary forest and darker green old growth forest.2

As of 2018, the funding for habitat restoration has almost run dry and the more direct interventions into the river system—removing concrete from the river, monitoring wildlife, and planting baby trees— are wrapping up. The restoration project is entering a phase in which the human actors, who have been deliberating and directing the renewal of this system for decades, must step back and watch how their labor plays out in the long term.

In this chapter, I argue that conflicting narratives of place and historic settler colonial relationships permeate efforts to reckon with and confront the damage done by the dams to the Elwha River. I begin first by showing how these dynamics came into being through the regulation of natural resources in the Elwha watershed by settler society. These regulations were linked to the larger project of undermining Klallam peoples’ sovereignty in the landscape. I argue that both capitalist and conservationist interventions in the landscape by settler society— including dam construction, early salmon conservation efforts, and the creation of Olympic National Park— aimed to exclude and limit the Klallam peoples’ historic relationships to the landscape. In my discussion of the dam removals, I highlight the ways in which settler colonial discourses and practices permeate efforts to restore the river.

When my DDCSP cohort visited the vestiges of the Glines Canyon Dam in July 2016, the restoration project was presented to us as a collaborative endeavor, in which Olympic National Park (ONP) – part of the National Parks Service (NPS)- and the Lower Elwha Klallam tribe (LEKT) were co-managers of the project, supposedly, equal partners. I questioned the generalizing statements of “inclusion,” with the understanding that partnerships are always challenged by stakeholder difference, especially when they follow a historical legacy of profoundly unequal power dynamics. I was uncomfortable accepting this narrative at face value, especially coming from a representative of ONP, given the anti-Indigenous histories of many national parks in the United States. Certainly, it is easier for the people who have historically held power in such relationships to declare that their projects are ethical, because they can erase and disregard the perspectives of the oppressed.
The Elwha Watershed

In this section, I weave together various narratives of the Elwha watershed to establish the context in which the river is being restored. I describe human and ecological histories to show how they are intrinsically linked. Furthermore, I demonstrate how contested narratives about the watershed are informed by existing power dynamics and structures.

Figure 2. Map of Elwha watershed with contemporary ownership designated³

The Elwha River Valley is the ancestral home of the Klallam (Nəxwsƛ̕ayəm) peoples, specifically the group recognized today as the Lower Elwha Klallam Tribe (LEKT). The Klallam’s creation story tells that their people were created when their

³ Ibid.
Creator scooped dirt from the earth to form the people, and then bathed and blessed them in the river. The Elwha flows through the northern half of Washington State’s Olympic Peninsula, descending 45 miles from its source, the Bailey Mountain range in the heart of the Olympic Mountains, to the river’s mouth on the Strait of Juan de Fuca.

Traditionally, ancestors of the LEKT lived in villages on both sides of the Strait of Juan de Fuca. Though they are commonly associated with coastal lifeways, the Klallam people interacted with the Elwha river valley for subsistence activities as well as social gatherings, migrating among villages within the watershed. With considerable gradients of precipitation, elevation and temperature, the Elwha river watershed supports a diverse mix of vegetation: low to middle elevations are dominated by western hemlock communities, the drier areas of the watershed are dominated by Douglas fir communities, and the subalpine and montane are dominated by subalpine fir and silver fir communities. These diverse plant communities facilitate and support various animal communities and assemblages, both terrestrial and aquatic. The health of any river ecosystem is inextricably tied to the health of the

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7 Ibid.
terrestrial environment, beginning with riparian vegetation.\(^9\) Forests provide the shade needed to keep river water temperatures cool, as well as nutritious leaf litter that falls into the river and feeds invertebrates at the bottom of the river food chain. The woody debris from fallen dead trees provides structural complexity to the river channel, creating pools and side channels, necessary for juvenile salmonids seeking to avoid predation.\(^10\)

Salmon are anadromous fish: they spend the beginning of their life cycle in freshwater, migrate to the ocean where they mature, before finally returning to their original spawning river to reproduce and then die. Salmon are drawn back to their birth streams by the Earth’s magnetic field and swim upriver to spawn, expending almost all of their remaining energy before dying.\(^11\) The importance of salmon to the entirety of Washington State cannot be understated, especially to the Coast Salish peoples, for whom salmon is a traditional food and a significant part of their cultural lifeways. Prior to the dams’ construction, the Elwha River had a reputation for being one of the most productive rivers in the Pacific Northwest, supporting bountiful runs of five types of Pacific salmon.\(^12\)

In 1855, representatives of several Coast Salish tribes on the Olympic Peninsula - including the Elwha Klallam, Jamestown S’Klallam, Port Gamble S’Klallam, and Skokomish- signed the Point No Point Treaty with the territorial Governor Isaac Stevens.\(^13\) The tribes were pressured to cede their best lands in

\(^9\) Ibid.
\(^10\) Ibid.
\(^12\) Ibid., 10.
exchange for small reservations and $60,000, but maintained the rights to harvest resources from their traditional lands.\textsuperscript{14} Following the dispossession of Klallam land, homesteading steadily began on the Olympic Peninsula in the 1860s and 1870s, following the passage of the Homestead Act of 1862 and the Timber Culture Act of 1873, which were laws drafted to encourage settler expansion into the recently acquired territories in the West. Under the Homestead Act, any United States citizen could claim ownership of 160 acres of government land in exchange for a small filing fee and five years of continuous residence on the land, and under the Timber Culture Act, 160 acres could be claimed following five years of cultivation and planting trees.\textsuperscript{15} Both of these pieces of legislation were enabled by the coercive removal of Native Americans from their lands with treaties.

The Klallam continued to live in their established villages in the Elwha watershed until settlers filed for homesteads or purchased their land by cash entry. The Indian Homestead Acts of 1875 and 1884 allowed Klallam tribal members and families to establish successful homestead claims, but at the price of renouncing tribal membership. Those that chose to remain within the tribe moved to Ediz Hook and around Port Angeles Harbor where their ancestors had lived before.\textsuperscript{16} Forced off of their land and out of their villages, the Klallam began to integrate into settler wage-labor economy to subsist in response to the rapid loss of access to their land and its associated resources.

\textsuperscript{14} Ibid.
\textsuperscript{15} Crane, \textit{Finding the River: An Environmental History of the Elwha}, 35.
The most devastating colonial intervention on the Elwha River came with the construction of two dams, material signifiers of energy production and “settler progress.” The Elwha Dam was built in 1912 to provide the growing settlement of Port Angeles and its burgeoning paper and timber mill industries with electric power. The dam’s patron, an industrial capitalist named Thomas Aldwell, lauded the technology for “conquering the wilderness.”\textsuperscript{17} As the paper and timber industries grew, the power capacity of Elwha Dam proved to be insufficient, resulting in the construction of a second dam: the Glines Canyon Dam, built in 1926. Located 8.5 river miles above the Elwha dam, Glines Canyon was an ideal site for a concrete arch dam, the popular type of dam in the 1920s built on rivers across the Western United States. Both of these dams were technically illegal under Washington state law because they lacked adequate fish passage.\textsuperscript{18} The 1842 Oregon Territorial constitution required fish passageways to be built accompanying any constructions that blocked the river, including dams, and remained applicable to the region even following the creation of Washington State in 1889.\textsuperscript{19} Still, Aldwell and the other dam proprietors faced no consequences, due the state’s inability to enforce regulation in the face of rapid industrial development and lack of real concern for maintaining healthy fish runs.

\textsuperscript{17} Crane, \textit{Finding the River: An Environmental History of the Elwha}, 56.
\textsuperscript{18} Ibid.
\textsuperscript{19} Ibid.
The decline in salmonid populations following dam construction was almost immediately noticeable. A present day LEKT member, Mel Elofson, recalled his grandmother’s remembrance of how the dams brought about the decline of the fish:

When the lower dam first went in, our homestead site was only about half a mile away from it, so she was able to walk down there. When the salmon returned in the summer and the fall they came back in huge hoards, and they were jumping, jumping, jumping, trying to get past this structure. A lot of them died and didn’t even spawn. Thousands and thousands of fish died that first year because they had no passage.21

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20 Chenoweth et al., "Revegetation and Restoration Plan" 13.
To mitigate the decline, a state managed fish hatchery was built at the foot of the dam in 1914 with funding from the Olympic Power and Development Company and land donated by Aldwell. Due to operational issues and a lack of institutional concern for salmon conservation, by 1922 the hatchery was discontinued.

As a technology of land management, hydroelectric dams are material symbols of “progress,” directly tied to Western expansion in the 20th century United States. In Richard White’s history of dams on the Columbia River in Oregon, he argues that dams in the American West were a vision of the machine as a force of nature: dams were a “part of the old romance of energy in Western society, a dream of liberation from labor, an end to social conflict and environmental degradation through the harnessing of nature’s power to human purposes.”

It was in the name of settler “progress” that dams were built across the West, playing a critical role in facilitating settlement by “supporting agriculture, delivering domestic water supplies, facilitating transportation, allowing for industrial development, and providing emissions-free hydropower.”

With dams, industrial capitalists like Thomas Aldwell were able to exert control over the Elwha River. Consequently, the river’s “power [was] harnessed (literally, in the form of hydro-electric power) to serve the grand purposes of colonial development,” supplying electric power to the Port Angeles paper mill and salmon cannery. With engineers putting support behind dams as a means for labor-free

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22 Crane, Finding the River: An Environmental History of the Elwha, 71.
23 Ibid., 86.
power and industrial capitalists carving into the river’s bed, rocks, and cliffs, rivers like the Elwha across the Pacific Northwest came to be associated more with industrial progress than salmon production.

As settler progress manifested in the material landscape of the Elwha watershed, the Elwha Klallam people’s lifeways were increasingly threatened. Coupled with declining salmon populations and the dispossession of their ancestral lands and accustomed resources, the Klallam were barred from fishing on the Elwha River under the guise of fish conservation programs devised to address the ecological ramifications of the dams. When it became clear that the fish populations around the state were in decline due to industrialized overharvesting, Washington State passed a fish conservation law in 1910, which required individuals to hold fishing licenses, which only citizens were eligible. But, Native Americans were barred from naturalization unless they gave up their tribal affiliation. Thus, the Klallam people were legally barred from fishing on their ancestral river, until tribal members were considered United States citizens in 1924. Harvesting from their ancestral river, a guarantee of the Point No Point Treaty, was rendered illegal in the eyes of the settler state. Under the pretense of protecting salmon from overharvesting, this conservation effort effectively undermined treaty rights and tribal sovereignty. The calculated alienation of the Klallam from their traditional lifeways demonstrates how controlling Indigenous access to natural resources, be it for extraction or conservation by settler

society, was a critical component of early settler-colonialism on the Olympic Peninsula.\textsuperscript{29}

Following the creation of Olympic National Park in 1938, about eighty-three percent of the Elwha River’s 321 square-mile watershed was protected from industry for the sake of conservation.\textsuperscript{30} The limits on industry activity due to the area’s designation as federal wilderness, particularly in the upper basin, helped to ensure that the river would remain relatively healthy compared to other rivers in the region that were heavily polluted by industrial logging and paper mill activity.\textsuperscript{31} Nevertheless, the creation of Olympic National Park also entailed the continuing exclusion of the Lower Elwha Klallam from their lifeways involving the river.

The ethic of National Parks, critiqued in many foundational environmental texts, was reliant upon the myth of “an unblemished wilderness” promoted by prominent conservationists such as John Muir.\textsuperscript{32} As historian Jake Kosek states, these thinkers created an “external nature shaped by internal lines and boundaries that separate pure wilderness from sullied society… [in which parks and wilderness areas serve as] monuments to the ideological separation between nature and society [becoming] material, naturalized reaffirmations of this spatial separation.”\textsuperscript{33} The idea of nature was facilitated by the elimination of Indigenous peoples and others deemed to have “no right place in the landscape.” Indeed, it was

\textsuperscript{29} Ibid.
\textsuperscript{31} Crane, \textit{Finding the River: An Environmental History of the Elwha}, 7.
\textsuperscript{33} Ibid.
Violent, racially driven dispossession…[which created] the conditions not only for the “wild”… exalted so passionately [by white environmentalists], but also the “solemn calm” they unapologetically experienced there.\textsuperscript{34}

The varied and violent histories of the United States national parks and the preservationist ethics behind them have been extensively explored within existing environmental studies literature.\textsuperscript{35} Nevertheless, these logics are relevant to the formation of Olympic National Park.

![Aerial Images of Lake Aldwell and Lake Mills prior to dam removal.\textsuperscript{36}](image)

Figure 4. Aerial Images of Lake Aldwell and Lake Mills prior to dam removal.\textsuperscript{36}

To the uninformed visitor’s eye, the Elwha looked like a pristine river in a protected park area. As constructed within the narrative of the people-less park, the two reservoirs behind the dams, Lake Aldwell and Lake Mills, came to be associated

\textsuperscript{34} Mark David Spence, \textit{Dispossessing the Wilderness: Indian Removal and the Making of the National Parks} (New York: Oxford University Press, 1999).


\textsuperscript{36} Chenoweth \textit{et al.}, "Revegetation and Restoration Plan " 5-6.
with recreation and leisure for the (typically white) public. Nevertheless, the dams
exacted an incredible toll on the ecosystem’s health. With no salmon accessing the
upper river, the terrestrial ecologies in the watershed were deprived of vital marine
derived nutrients that used to cycle through the food chain, rendering the whole
system less productive.\textsuperscript{37} The blockage of river flow resulted in the build up of
sediment behind the dams that otherwise would have flown down to the mouth of the
Elwha. Furthermore, with the creation of Lake Aldwell and the flooding of the river
area, the tribe’s creation site was submerged and no longer accessible. With the dam
controlling and regulating river flow, soon the river did not even fully flow to its
former mouth at the Strait of Juan de Fuca. The lack of sediment deposition resulted
in the slow depletion of the beach at the mouth of the river. What was once a beach,
where the Klallam harvested clams and other bivalves for subsistence, soon became a
rocky shore.

In 1935, when the settler community wanted to develop the city’s waterfront,
the Lower Elwha Klallam were moved out of Port Angeles onto 372 acres of
federally owned land at the mouth of the Elwha River. In 1968, amidst the growing
national Red Power movement,\textsuperscript{38} the land at the mouth of the river was officially
designated the Lower Elwha Klallam Reservation by the United States Federal
Government. By the time the Lower Elwha Klallam’s reservation was created, the
area had lost its capacity to support clam beds due to the changed sediment load near
the mouth of the river, resulting in the loss of an important subsistence resource for

\begin{itemize}
\item \textsuperscript{37} Crane, \textit{Finding the River: An Environmental History of the Elwha}, 135.
\item \textsuperscript{38} The Red Power movement was a social movement in 1960s-1970s in which Native
American youth took mass action for rights to self-determination, acknowledgment of
treaty agreements, and recognition in settler society.
\end{itemize}
the tribe.\textsuperscript{39} In the landmark Boldt decision (\textit{United States v. Washington}) of 1974,\textsuperscript{40} tribes were guaranteed their treaty rights as established in the various treaties signed during the mid-19th century, including the Point No Point Treaty of 1855. The Boldt decision re-established federally recognized tribes as co-managers of fisheries with the State of Washington and reaffirmed harvesting rights to 50\% of the fish available in traditional tribal fishing grounds, as outlined in the original treaties. The Boldt decision required increased tribal governance from the LEKT to sufficiently meet settler society’s standards for resource management.\textsuperscript{41} In response to the Boldt decision, the LEKT amplified efforts at salmon conservation on the lower part of Elwha river.\textsuperscript{42}

Tensions between the LEKT and the settler-state are evident in the Port Angeles community as well. In 2003, the Klallam village of Tse-whit-zen (č’ixwícən) was unearthed in the development of the Port Angeles waterfront. In the accidental rediscovery of the village, the resting remains of Klallam ancestors were uncovered. Unlike other remains, which had been uncovered with markers that showed that the bodies had been carefully laid to rest, this burial was a mass grave that contained the bodies of those who had died during a smallpox epidemic.\textsuperscript{43} Construction was halted in order to allow the tribe to appropriately gather and transport the remains off of the site onto tribally owned lands, where they could be given a proper burial. As an effort to make amends, the city of Port Angeles allocated part of the property for reburial of

\textsuperscript{39} Crane, \textit{Finding the River: An Environmental History of the Elwha}, 139.
\textsuperscript{40} See United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974).
\textsuperscript{41} Olympic National Park and Historical Research Associates Inc., "River of Power," 81.
\textsuperscript{42} Crane, \textit{Finding the River: An Environmental History of the Elwha}, 131.
\textsuperscript{43} Wray, \textit{Native Peoples of the Olympic Peninsula}, 61.
remains and leased a portion for the tribe to develop a museum to promote cultural heritage.\textsuperscript{44} Yet the accidental exhuming of Klallam graves illustrates how the histories of violence in the region have been silenced and erased from the settler community’s collective memory. The drive to develop the waterfront was interrupted by the inconvenience of Klallam bones, an unexpected physical reminder of past violence against the Klallam community.

**Powering Dam Resistance**

This section explains the political factors that facilitated dam removal and river restoration. Crown Zellerbach, the company that ended up acquiring both the Elwha and the Glines Canyon dams, filed applications for re-licensing the dams with the Federal Energy Regulatory Commission (FERC)\textsuperscript{45} in 1968 and 1973, sparking nearly two decades of debate regarding the impact of the dams on the Elwha fisheries.\textsuperscript{46} Following the Boldt decision, the LEKT were recognized as a co-manager of salmon in the Elwha watershed and consequently had more leveraging power in debates surrounding the dam’s harmful ecological impacts. According to Robert Elofson, an LEKT member and the former head of Elwha River Restoration for the tribe, the LEKT gained status as petitioners in the case, before then filing a motion in 1986 to interfere with the process of relicensing the dams.\textsuperscript{47} The tribe’s motion to phase out and remove the dams was supported by several environmental groups, with

\textsuperscript{44} Ibid.
\textsuperscript{45} The Federal Energy Regulatory Commission is the federal body that regulates and relicenses dams every 50 years in the United States.
\textsuperscript{46} Crane, *Finding the River: An Environmental History of the Elwha*, 131.
\textsuperscript{47} Robert Elofson, interview by Olivia Won, July 25, 2017, Port Angeles, WA.
little to no support coming from the state or the federal government. FERC was not required to consider environmental impacts of dams until the 1990s, but by then, the LEKT and environmental groups were garnering widespread support for the dams’ removal. In 1991, dam removal was beginning to look like a real possibility:

Congressmen were supporting it, the federal agencies were supporting it, the company was supporting it, because it was a compromise where the US would take care of the dam removal if the company turned over the dams and the property around them. It was beneficial to everyone involved in the discussions, so [actually removing the dams] was looking more and more hopeful.49

With the passage of 1992 Elwha River Ecosystems and Fisheries Restoration Act, signed into law by George H.W. Bush, the federal government provided funding for the federal acquisition of the Elwha and Glines Canyon Dams and required a specific plan to achieve a full recovery of the Elwha ecosystem and fisheries. Dam removal was later selected as the most cost effective mechanism for achieving these goals.50 The bill’s passage could be read as the federal government responding to the LEKT’s requests to right the past wrong of building the dams in the first place. Nevertheless, the legislation was motivated by the economic productivity that restored salmonid runs could potentially bring to the area. Contrary to the rhetoric employed by the state’s representatives, altruism was not the guiding force in the passage of the Elwha Act or the decision to fully remove the dams from the river. Removing the dams was the most cost effective means to restore harvestable fish runs and, therefore, the only viable solution. The complicated logistics of dam removal

48 Crane, Finding the River: An Environmental History of the Elwha, 146-47.
50 Joshua Chenoweth, interview by Olivia Won, July 20, 2017, Port Angeles, WA.
demonstrate how ecological restoration can come to be commodified and controlled by those in power.

On September 17, 2011, the Lower Elwha Klallam Tribe celebrated the beginning of the dams’ demolition. At the ceremony, LEKT elder Bea Charles Sr. described dam removal as an answer to the prayers of her ancestors, who had lived through the trauma of watching the river system collapse under settler influence:

> Prayers are answered today that all down through the years have gone up through my aunties, my uncles, my ancestors. They lived on these waters and prayed when they saw the damages done. When all the things started to happen, many tears were shed. Many lives were lost. But I can see them because they are standing here now, in a great cloud of witness, and they are all so happy, some of them are crying. They are the ones that prayed in earnest, and so many times it seemed prayers were in vain, so many things they were hoping for seemed to fly away.51

Though the Klallam people were dispossessed of their lands on the Elwha River, they were by no means placeless: as Colleen Boyd notes, the loss of land did little to obscure “the more than 10,000 years of symbolic importance the Klallam attached to their environment and its resources.”52 In August 2012, the Lower Elwha Klallam Tribe performed the first salmon ceremony and blessing to welcome the salmon home above the Elwha Dam site for the first time in over a century.53

Because the federal government needed to find funding to purchase both dams and the surrounding land area for $29.5 million before any process of removal or restoration could begin, dam removal was not expected to start until after 2004.54 Yet, much of the infrastructure for the river’s restoration, including a new hatchery, needed to be built as soon as possible. As a co-managing partner in the restoration

52 Boyd, "Change Is Coming," 77.
53 Guarino, "Tribal Advocacy and the Art of Dam Removal," 141.
54 Chenoweth, interview, July 20, 2017.
project, the LEKT was able to apply for alternative grants to begin getting this work underway. As stipulated in 1992 bill, dam removal required a thorough restoration plan, resulting in the formal creation of the Elwha River Restoration Project. The plan, co-written by the LEKT and ONP, was completed in 2008, when the Obama administration was poised to allocate money from the federal stimulus package to any “shovel-ready” projects. As stated in “The Elwha River Fish Restoration Plan,” bringing back the salmon would be facilitated by a careful observation of the river’s response and adaptive management:

The restoration of anadromous fish aims to re-establish the populations of native stocks that thrived in the Elwha River before the dams were constructed. Over the 20 to 30 years following dam removal, biologists predict that populations of anadromous stocks will rebound to historic numbers. The restoration strategies developed for each Elwha salmonid are intended to be adaptive and flexible, and may change based on how the fish populations respond. If one strategy proves to be unsuccessful, biologists will use another in order to produce a healthy, naturally spawning population.

The two entities began collecting pre-dam removal data about the conditions of the watershed, focusing on species that relied upon the river, such as dippers, river otters, elk, and, of course, fish. Though the project is co-managed by the LEKT and ONP, other organizations, like USGS, NOAA, U.S. Fish and Wildlife, and area colleges, have been involved with researching the restoration in some capacity. Scientists representing these organizations formed the Elwha Research Consortium in 2005 to pool resources and organize research objectives strategically. The river and

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its unprecedented change has been a hotspot for the production of academic work across various disciplines, especially in the natural sciences.

The core idea of the restoration plan was that natural recolonization of the Elwha by salmon is essential to any sustainable restoration of the ecosystem. Thus, while the plan included artificial supplementation of hatchery-reared Coho, Chum, Pink, Sockeye, Chinook, and Steelhead salmon to the river, the project’s primary focus was habitat rehabilitation. The ultimate goal was a restored watershed that would allow salmonids to naturally recolonize the river in historic numbers. Because of the extent of the damage the dams had inflicted on the landscape, it was assumed necessary that the project would do “active restoration” of the habitat rather than allowing for the ecosystem to bounce back on its own terms. The revegetation plan predicted the possibility of dire scenarios without this active intervention:

Without native vegetation restored to the riparian zones and surrounding uplands, the dewatered reservoirs will become barren landscapes susceptible to erosion, and the terrestrial ecosystem will fail to moderate stream temperatures or deliver nutritious litter crucial to aquatic ecosystems.

Nevertheless, in spite of the emphasis placed on habitat restoration in the written plans, very little project funding was allocated to the component seen by restoration ecologists as absolutely necessary to ensure long-term ecological recovery. The revegetation project was only funded for seven years.

Central to the restoration of the floodplain environment was the reforestation of the 400 acres of land where the reservoirs once were. Dam removal had to be done gradually to avoid flooding the river with the sediment that had built up behind the

57 Ibid.
58 Chenoweth et al., "Revegetation and Restoration Plan" 1.
dams over the last decades. Simply blowing out the dams, causing the uncontrolled release of this sediment, would have rendered the Elwha entirely uninhabitable to aquatic invertebrates and salmonids and threatened the Port Angeles water supply. During the gradual drawdown of Lake Mills in dam removal, the 24 million cubic yards of sediment that had accumulated behind the Glines Canyon dam were deposited into thick terraces around the floodplain. The nutrient-less sediment resembled “a moonscape,” devoid of any signs of life following the many years of disturbance brought about by the dams. Because of how “lifeless” the terrain was, restoration practitioners said they didn’t see their work as restoring a degraded habitat, but as facilitating primary succession.

According to Joshua Chenoweth, the project head for the ONP Elwha Revegetation Project, his work was guided by the ethic that “restoration ecology needs to focus more on processes and functions of the ecosystem and less on modeling after a similar ecosystem.” Because the sediment is so far from the normal substrate needed to support the forest communities typical to the area, the goal of having pristine mature forest surrounding the floodplain is unlikely to be realized in the coming decades. As Josh described it, “we don’t really believe in succession as predictable and on trajectories that are easy to determine, instead we think of them as

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60 In ecological theories of succession, or changes in species composition over time following disturbance, there is primary succession and secondary succession. Primary succession is the colonization of habitats seemingly devoid of life, while secondary succession is the re-establishment of some aspect of communities that have been degraded, but not completely destroyed.
Consequently, the design for restoring the reservoirs shifted to focus on ecosystem function rather than on specific species.

Dave Allen, head botanist for the ONP Elwha Revegetation Project, said that the goal for any vegetation restoration is to “select species that hopefully will survive and that you can be efficient in collecting, producing and distributing.”

A core element of this involved using only what was “meant to be there,” or plant populations that had evolved in the specific conditions of the Elwha Watershed. Project staff only collected seeds and propagules in the watershed in order to preserve the genetic integrity of native plant populations. Dave, in particular, was incredibly wary of the possibility of introducing non-traditional genes into the ecosystem, out of fear that the project could be responsible for recklessly introducing non-native genes that could disrupt species composition and ecological function of the region. He emphasized that “true restoration” involves being conscious of not introducing genes that have evolved in drastically different environments, suggesting that even watersheds located a few miles away from each other ought to be considered as such.

By the time the funding for the habitat restoration of riparian forest was nearly exhausted in the summer of 2017, the river had indeed changed. In the few years that had passed since the dams’ complete removal in 2014, many involved in the project pointed to clear “successes” that had occurred following dam removal. For the vegetation component, the scientists working with ONP saw their interventions into

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62 Ibid.
63 Dave Allen, interview by Olivia Won, July 1 2017, Sequim, WA.
64 Ibid.
the landscape as hugely successful: Josh told me, “we’ve got secondary forests
growing and vegetative cover, which was our goal.” Lupinus rivularis, or riverbank
lupine, a species extirpated from the Elwha watershed, is now thriving once again on
the banks of the Elwha. Riverbank lupine comprises most of the vegetative cover on
the coarse sediment, which Dave said was “the most important thing we have
done.” When the dams were built, there was no longer a healthy river to grow
around and riverbank lupine was locally extinct from the Elwha. The ONP
 revegetation staff had to collect riverbank lupine seeds from the neighboring
Dungeness river watershed, about 20 miles away. Despite of all of Dave’s carefulness
towards preserving the genetic integrity of plants in the Elwha, it is the sister
population of riverbank lupine from another watershed that is doing the most work to
build up the soil on the former lakebed of Lake Mill and facilitating forest succession.

Another early success of the restoration project has been the renewed
relationship between the marine and terrestrial environments, through the unseen
exchange of marine-derived nutrients in the Elwha’s food webs. For example, river
otters (Lutra Canadensis) in the upper Elwha River did not have access to marine
derived nutrients in their diets prior to dam removal. After dam removal, however,
scientists with the LEKT found that these river otters were now able to access the
lower river and, consequently, had greater marine derived nutrient concentrations in
their diets. Within one year of dam removal, the scientists with the LEKT found that
the American dippers (Cinclus mexicanus) living between the two dams were getting

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65 Chenoweth, interview, July 20, 2017.
66 Allen, interview, July 1 2017.
67 Kim Sager, interview by Olivia Won, July 21, 2017, Port Angeles, WA.
marine derived nutrients in their diets, implying that there was an increase in salmon consumption, presumably because salmon were once again able to access the middle river. Moreover, they found that dippers with access to salmon had higher survival rates and were more likely to double brood, or have two nests. The wildlife response to dam removal demonstrates how ecological resurgence is necessarily a multi-species process.

With the dams gone, the sediment that naturally accumulates with the flowing water could once again be deposited at the river’s mouth at the Strait of Juan de Fuca. Because the mouth of the river is located on the LEKT reservation, the newly arrived sediment is reforming the beach that was lost. With the new beach, the tribe will have proximate access to harvesting clams, a traditional food that became less accessible following the forced exclusion of the tribe from Ediz Hook. Additionally, the sandy habitat has also brought a rise in the numbers of crabs on the lower river accessible to the tribe for harvesting.

Still, every person involved with the restoration project that I spoke to saw the processes of restoration as nowhere near complete. This was most apparent in how restoration practitioners spoke about fish restoration as necessarily continuing into the decades to come. The immediate salmonid response to dam removal has been perhaps the most underwhelming to restoration practitioners. According to Robert Elofson:

I had great hopes that the salmon would come back faster than expected… They’re expecting runs of 30,000 for Chinook, Coho, Chum and 10,000 for Steelhead and 150,000 for Pinks and we’re not seeing anything [like that.] We’re seeing like 4,000 chinook and a thousand plus steelhead. We’ve had over 4,500

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68 Ibid.
69 Laurel Moulton, interview by Olivia Won, July 10, 2017, Sequim, WA.
Chinook [in the past] couple years… We don’t expect a good return this year, maybe next year… it should start building up and it should continue to build up.\textsuperscript{71}

Though the dams were removed and the river’s restoration has been underway, the promise of returning fish has not yet been realized tangibly. Without the fish, the “healing” promised from the dam removal feels lacking and the extent of the damage from the dams is perhaps being made even more clear in the continued absence of salmon. Because the work of restoring is understood within restoration ecology as happening on a much longer time frame than has currently elapsed since dam removal, the “it’s just a matter of time” attitude makes sense. But the other possibility— that the damage can never fully be fixed— permeates anxieties about the low fish numbers, despite it never being entertained as a serious potential reality.

According to Robert Elofson, there were four viable options for the project lands containing Lake Aldwell following dam removal: the land could be designated a Washington state park, designated a wildlife refuge managed by the Forest Service, subsumed into Olympic National Park, or given to the tribe. The area was too small to be made into a wildlife refuge and the state was “already having trouble taking care of the parks that it already had, “so those options were out.”\textsuperscript{72} Those I spoke to working with on the ONP side of the restoration project agreed that the Aldwell project lands should be given to the tribe, considering that Olympic National Park was already experiencing substantial funding cuts and already possessed 1,442 square miles of the Olympic Peninsula that they were struggling to manage. Speaking on behalf of the LEKT, Elofson noted: “our position was the park already has enough of

\textsuperscript{71} Ibid.
\textsuperscript{72} Ibid.
the river valley in park ownership and [personally,] I think it would be appropriate for the tribe to have tribal ownership of it.”

What is being restored?

As the largest dam removal ever attempted, co-managed by a national park and a federally recognized Native American tribe, project is both ecological and political. In having to critically articulate what the Elwha River and surrounding watershed ought to be, restoration practitioners had to navigate conflicting narratives about the meanings and usage of the Elwha as located within the larger settler-colonial context. Given that a project of this scale and of this kind had never been done before, there are high stakes for its outcomes. The restoration of the river would be trailblazing its own story, setting the example for other projects with a decolonizing bent to follow.

The question of what is actually being restored in the Elwha River Restoration Project is not necessarily obvious. The project’s official objective is to rehabilitate the Elwha River to pre-dam conditions, creating the environmental conditions for fishable salmon runs. The project’s component parts, including revegetation and wildlife monitoring, are theoretically all in service to helping the fish rebound. Still, the other material results of dam removal, including the re-surfacing of the LEKT’s sacred sites inundated by Lake Aldwell and the re-creation of a beach at the mouth of the river, demonstrate how restoring the river is (literally) opening up space for the LEKT to reconsider their roles in their ancestral lands following a century of exclusion.

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73 Ibid.
In its ongoing persistence as part and parcel with the LEKT’s peoplehood, the Elwha River transcends the utilitarian terms and meanings ascribed to it by most restoration practitioners. Robert Elofson recounted to me that once a group shooting a documentary told him they wanted to interview “someone that had good strong spiritual ties to the river… not just any tribal member.” Elofson explained his surprise to me: “I was stunned that they think that any Elwha doesn’t have strong spiritual ties to the river, you know I was surprised and I told them that. I mean all of us go down to the river, see how its doing, you know we just love it when the fish are running in the river.” Salmon are considered a cultural keystone species for several Coast Salish peoples, including the LEKT. When the dams were acquired by the federal government, Frances Charles, the chairperson for the Lower Elwha Klallam Tribe stated, ‘this story is about the fish.” The river’s health and restoration are tied to the salmon, particularly for the LEKT: as Charles stated, the LEKT were anticipating “the abundance of fish from the stories our ancestors have been telling us about since the dams went up… we want them back and revived for our children, and our children's children.” Restoring salmon populations is about more than just ensuring the longevity of the fish as a resource, alimentary or economic or culturally. It is about establishing the tribe’s place in the landscape of the Elwha River by returning the centrality of salmon and the river to the Lower Elwha Klallam as a living, dynamic people.

74 Ibid.
76 Ibid.
Shaping Restoration Going Forward

The individuals doing the actual restoration work, told me they saw their work as “righting a past wrong,” referring to the role the dams played in devastating the river and, by extension, the LEKT. Most of the people working on the project saw themselves very much on the right side of history by just being a part of the restoration in any way. Yet, the colonial and capitalist structures that justified the dams’ implementation in the first place have not been dismantled. The failure on the part of the non-tribal members working on the restoration to fully acknowledge this limits them from actually addressing the root of the problem: settler colonialism and the consequential alienation of modern Indigenous peoples from their ancestral lands.

In its maintenance as a non-human use space, the park produces the environment as a discrete realm, distinct from human intervention. Bruce Willems Braun argues that this vision of nature serves to further the project of settler colonialism: nature was constructed to separate it from “colonized people” to render it “visible” and therefore “available” to colonial administrators.77 Within this framework, land use and management of the environment can be discussed without reference to how nature has been “constituted within, and informed by, the legacies of colonialism.”78 The historical nature of “nature” is left unquestioned, resulting in landscapes stripped of histories of Indigenous cultural interactions and colonial violence. What was deemed wilderness by settlers in the Pacific Northwest was a

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78 Ibid.
landscape “already altered and inscribed by Indigenous cultural practices and norms.”\textsuperscript{79} Olympic National Park, which dedicates itself to protecting and preserving the ecological integrity of the space, furthers the erasure of the LEKT from the landscape by perpetuating the invisibility of settler society.

From the project’s inception, group-specific interests informed ONP and the LEKT’s goals for the restoration. The ways in which each group’s goals have been met and responded to differ based on the complex power dynamics and histories between them. In my time working for the ONP Revegetation project, one glaring example of the gap between the narrative of a picture perfect, collaborative partnership driven by mutual respect and the day-to-day reality was the fact that no one working for the park had any contact with tribal members involved in the restoration project other than the scientists working for the LEKT. This demonstrated the extent to which actual restoration practice is almost entirely grounded in the realm of the scientific, such that voices from other disciplines are not involved or incorporated into restoration practice in a meaningful way. ONP staff were concerned about the visible lack of communication with the tribe and frequently articulated that the LEKT was the most important human actor in the river’s restoration:

Let’s not forget, its that tribe that spearheaded this whole project, that were the instigators from the day the dams were built to now, who said ‘these dams have to come down, we want the Elwha restored, we want the fish coming back.’\textsuperscript{80}

This language suggests that the tribe’s main contribution to the project was the leveraging of their political power and history of oppression to galvanize support for the dam removal. Though the importance of that effort is not to be taken lightly, little

\textsuperscript{79} Boyd, "Change Is Coming," 61.
\textsuperscript{80} Allen, interview, July 1 2017.
to no credit is given to the tribe in terms of the restoration work following dam removal beyond acknowledging that the grant money received by the tribe was critical in funding and employing non-tribal scientists. Much of the ONP team’s frustration comes with the fact the LEKT’s revegetation crew, headed by non-Indigenous scientists employed by the tribe, has had problems in the past with the consistency of labor from the tribal members hired on the crew. The ONP crew often criticized the LEKT’s crew for not doing a “good enough job,” namely in weed management due to a “lack of expertise.” As Dave Allen honestly noted on the dynamics,

Working with tribal culture is different than working with accepted, European-based America, so there has been some difference in work ethic and productivity and some of that can be frustrating.

Laurel Moulton, a non-Indigenous scientist employed by the LEKT, filled the role of mediating and vocalizing the tribe’s interest while working part-time with the ONP crew. She described several instances in her time as the tribe’s liaison on the ONP Elwha Revegetation Project when ONP staff referred to “cultural differences” between tribal members and non-tribal members in a way that reinforced divisions between the tribe and the park and devalued the overall contributions of the tribe to the project. This uneven dynamic was exemplified when the LEKT crew did not get their own key to the entrance of the Lake Mills project lands and instead had to rely on the ONP crew for access to the site. Laurel described the dynamic of being an employee representing the LEKT and navigating anti-Indigenous sentiment as frustrating:

81 Chenoweth, interview, July 20, 2017.
82 Allen, interview, July 1 2017.
I spend a lot of time defending the tribal [vegetation] crew to people with the Park Service because there are pre-conceived notions that the crew is ‘lazy’ and then they don’t give them a key because they’re afraid that they’re going to abuse that privilege. There are incidents that have happened so I don’t think people are just racists, but it is probably influenced by that.83

Much of the language employed by non-tribal members concerning the tribe and its relationship with the Elwha conflated Indigeneity and sustainable resource use, a relatively common tactic employed within the Western environmental movement. In talking about the politics of land use, for example, Dave noted that the tribe’s “use of that river is much healthier than our use of that river.”84 Though this language implies admiration, the notion that Indigenous peoples are distinct from non-tribal peoples in their inherent connection to place has been used to limit Indigenous identity formation to “traditional” ways of being with the environment. This “expropriation of their cultures” can result in contemporary Native people finding “themselves left out of broader discussions about the environment if they are unwilling to conform to other’s beliefs and stereotypes about how they should think and behave.”85 Indeed, individuals in environmental fields can use this loaded language of “respect” in ways that limit Indigenous peoples to narrow and misguided definitions of traditional or authentic Indigeneity. Such views erase the contributions that Indigenous people can and do make to knowledge production about place, within and outside of the conventions of WESK. Essentializing the roles that certain people can play in work that “makes” place is a reproduction of colonial practices that justify

84 Allen, interview, July 1 2017.
certain modes of exclusion and undermine Indigenous peoples’ capacity for complex identity formation.

Legacies of previous colonial practices are evident today as tribes struggle to reclaim a place in public discourse on the appropriate uses of the environment and its resources. A recent example of this was when another tribe on the Olympic Peninsula, the Makah, came under fire from environmental groups in response to their campaign to restore the tradition of ceremonial whaling. Indeed, this demonstrates how the notion of inclusion in the environmental field ultimately comes to mean “assimilation” into mainstream, white environmentalism: minoritized groups are welcomed only to the extent that they can forgo group-specific interests or ways of seeing the world. This standard makes it impossible, as Joanne Barker argues, for Indigenous peoples “to narrate their historical and social complexities of cultural exchange, change, and even transformation-to claim cultures and identities that are conflicted, messy, uneven, modern, technological, mixed.”

This surface level inclusion recognizes Traditional Ecological Knowledge as a valid form of knowledge, but fails to give it the same degree of weight or importance as WESK. Traditional Ecological Knowledge is defined as “a cognitive system made up of knowledge, practices, behaviors, and beliefs by which local populations internalize the structure and ecological functioning of the geographic zone from which they get natural resources to fulfill their needs.”

Indigenous knowledges as a valid epistemic tool though, scientists reduce these knowledges to side projects that hold far less importance to the restoration than the WESK component. In this way, disciplines like ethnobotany and ethnoecology are “held as a symbol of pre-contact nature heritage divorced from contemporary nature practice,”\(^88\) interesting as a side project, but not valued in the same way as peer-reviewed scientific studies.

The absolute prioritization of scientific research as the most important component of the project produces a culture in the project that is notably Western and inflexibly so. Most of the scientists spoke about the restoration of the Elwha through the lens of restoration ecology or WESK, the dominant paradigm used in most ecological restoration projects.\(^89\) Kim Sager, a non-Indigenous wildlife biologist for the LEKT put it bluntly, saying “there is nothing like the Elwha watershed” that could be matched or compared to for ecological research.\(^90\) Due to the uniqueness of the ecological system in question, the production of scientific knowledge about the restoration processes has been one of the largest priorities of both ONP and the LEKT. As members of the Elwha Research Consortium stated: “The Elwha is a perfect test of whether removing dams can help restore a river. The lessons learned from restoring the Elwha will be in every ecology book for the next 50 years.”\(^91\)

The ONP revegetation team argued that producing knowledge about the ecosystem’s response to dam removal was a primary goal because findings from the

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\(^{88}\) Poe et al., "Urban Foraging and the Relational Ecologies of Belonging."


\(^{90}\) Sager, interview, July 21, 2017.

\(^{91}\) Guarino, "Tribal Advocacy and the Art of Dam Removal," 139.
Elwha could potentially inform and assist in the management of future dam removal restoration projects. This knowledge, however, was not being generated alongside other systems of understanding or being effectively communicated to the non-scientists in accessible terms. Additionally, at times the research seemed to require removing humans from the landscape entirely: When I worked alongside ONP field technicians, I heard frequent complaints about park visitors trampling on the vegetation and disturbing experimental plot markers. This was probably because there weren’t signs clearly stating that the area was sensitive because of the restoration project and should have been an opportunity for the ONP staff to consider how better to communicate this information to park visitors. As illustrated by the complex historical narratives about the Elwha, the river’s restoration should seek to transcend the disciplinary limitations of restoration ecology because of the ways in which the project is tied to the larger contemporary struggle for autonomy of Indigenous peoples of the United States. Still, the emphasis on scientific knowledge production about the post-dam Elwha watershed, demonstrates restoration practitioners’ tendency to prefer conducting research over facilitating human relationships to place.

By virtue of the way hiring works with the Parks Service, where employment on restoration projects is usually seasonal, the workplace culture doesn’t incentivize people to stay in a given place and “become really invested in the surrounding community.”

92 Jill Zarzeczny, former volunteer coordinator for the ONP Elwha Revegetation Project, said that the structure with ONP is the largest problem with how decisions about the park are made: “How do you make good decisions for a park

92 Jill Zarzeczny, interview by Olivia Won, July 17, 2017, Port Angeles, WA.
if you’ve only been there for a couple years? How do you know the culture of that place, with the people that work in the park and live around the park?” As the volunteer coordinator for the project, Jill was well aware of the issues associated with prioritizing research over people in a place that is theoretically supposed to be maintained for the public:

Big picture, the struggle with scientists is remembering that we don’t exist in a bubble… like how does the work we’re doing fit into the bigger picture of the people that live and use the park, because the park is here for people.

Nevertheless, though the ONP staff recognized these limitations, they did not see themselves as influential enough to enact the change that is needed within the NPS. Many of the people I spoke to deferred it as an issue of the “larger culture,” existing outside of themselves and beyond their control.

The NPS’s failure to involve communities maintaining historic relationships with the land is nothing new and neither are calls to address this problem. The National Environmental Policy Act, passed in 1969, and the National Historic Preservation Act, passed in 1966, were two key pieces of legislation that aimed to bridge this gap by requiring federal agencies to actively seek public involvement in agency decision-making processes for natural and cultural resource management.

Still, as recently as 2002, NPS managers were found to be “reluctant to consult outside agency boundaries,” tending to think of people associated with the parks

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93 Ibid.
94 Ibid.
only as either “(a) connected to the archaeology of past cultures, or (b) visitors to parks.”\footnote{Wray et al., "Creating Policy for the National Park Service," 45.}

Within non-Indigenous groups sensitive to tribal rights, there is a growing acknowledgement that the logic of non-use in national parks explicitly conflicts with treaty rights. In June of 2016, then Secretary of the Interior Sally Jewell announced that the NPS would be modifying “the regulation governing the gathering of plants in national parks to allow members of federally recognized Indian tribes to gather and remove plants or plant parts for traditional purposes.”\footnote{Jeffrey Olson, "National Park Service Modifies Regulation for Gathering Plants for Federally-Recognized American Indian Tribes," news release, June 29, 2016, 2016, https://www.nps.gov/orgs/1207/06-29-2016a.htm.} The NPS rule requires each tribe to prove their methods are sustainable by carrying out environmental studies and to prove traditional association to lands within the national park system.\footnote{Mike Anderson, "New Rule Allows Native Americans to Remove Culturally Sensitive Plants from National Parks," \textit{Rapid City Journal} August 22, 2016 2016.} The opening of the parks to allow for greater tribal access to culturally important plants reflects that, on some level, the NPS is conscious of the limitations of its management model.

Nevertheless, though official policies involving the accessibility of Olympic National Park have changed, the physical place still carries legacies of anti-Indigenous exclusion that have accumulated over the last 200 years. As Kosek notes, though meanings of place are not static or unchanging entities, “[they are] not easily changed;” indeed, “the density with which the social relations of race and classes are embedded within these spaces of ‘pure’ wilderness has helped reproduce attitudes
about the nature of race and perpetuate the racialization of nature.\textsuperscript{100} This dynamic is illustrated in recent work done by ethnographers Dobkins \textit{et al.} characterizing the intangible barriers preventing now-legal Indigenous harvesting on United States federal lands. They found that key issues include “physical barriers (such as gates and closed roads), difficulties with the permitting process, inconsistent relationships between forest managers and tribal communities, underdevelopment of co-management arrangements, and the negative impact of commercial forest industries on desired plant resources.”\textsuperscript{101} These barriers are not just minor inconveniences; rather, they are “barriers to sustained relationships with plants on ancestral lands [and] negatively affect the ability of tribal members to practice and transmit cultural knowledge and to create culturally valued objects.”\textsuperscript{102} Thus, the continuing endorsement of pristine, people-less parks in the United States can be understood as a form of cultural imperialism.\textsuperscript{103}

Dobkins \textit{et al.} suggest that for the federal government to adequately protect tribal rights for use of public lands, there must be deep institutional re-learning:

Suggestions include education for all federal lands agency staff on tribal sovereignty, the trust relationship, and specific tribal histories; an embrace of consultation practices and protocols that operationalize policies… and the development of meaningful cooperative arrangements such as memoranda of

\textsuperscript{100} Kosek, \textit{Understories}, 157.
\textsuperscript{102} Ibid.
\textsuperscript{103} Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," 82.
understanding, memoranda of agreement, and co-management agreements that incorporate Native knowledge and rights to biocultural resources.  

Beyond the micro political tensions between the LEKT and ONP crews, there are also interesting dynamics at play between the scientists working for the tribe and the tribal community. Though the tribe prioritizes hiring tribal members, the desire for a majority tribal-member staff often can’t be met due to interpersonal difficulties or a lack of displayed interest from tribal members applying for positions. Kim Sager noted that her difficulties hiring tribal members for the wildlife program crew were “not because they’re lazy tribal members…but because] it was challenging finding people that knew what I needed to have done and understood why they needed to be on time.” At present, the wildlife program crew, which Kim raves is “a great crew,” has one Lower Elwha Klallam tribal member, a Tlingit tribal member, and two non-tribal members. Kim told me that she sees her work, as a non-Indigenous scientist trying to build the LEKT’s wildlife program, as extending beyond just trying to hire tribal members already working in natural resource management. She aims to encourage tribal youth engagement and provide training to any tribal members interested in the wildlife program, regardless of prior experience, in order to create a pathway towards a majority-LEKT staffed department:

Everyone wants to hire tribal members, everyone wants to train tribal members up to fill their positions and fill their roles. I tell them at the end, ‘come train with us, come learn with us, be an intern, come volunteer with us,’ because that’s the goal. My goal is to work myself out of a job.  

104 Dobkins et al., "Cultural Plant Harvests on Federal Lands: Perspectives from Members of the Northwest Native American Basketweavers Association."  
106 Ibid.
When Kim and I spoke, she had just written two grants for Catherine, one of the LEKT tribal members that she works with, who had just graduated from college with an environmental science degree and planned to attend graduate school. “For all the education programs, everyone wants to make sure Catherine is going to be there, because she’s a huge role model.” The effort to promote tribal member representation in the LEKT’s wildlife programs illustrates the tribe’s commitment to pursuing more self-sufficiency in its natural resource management. The interest in having a wildlife program reflects a commitment to sustainably monitor and manage game animals, an important subsistence and economic resource for many LEKT individuals and families. The practicality of game management is perhaps a larger sell to most than the research concerning the Elwha restoration project, according to Sager: “I think they think [the Elwha research is] cool, probably, but mostly there’s a concern about making sure there’s game to be harvested for future [and current] generations.”

Kim’s emphasis on the importance of purposely providing training to tribal members to embody and practice multiple ways of being in the world demonstrates what allyship must look like. The confluence of identities and knowledge systems with environmental work are inevitable, yet often discouraged in conventional environmentalist spaces. Indeed, as Lecompte notes “the barriers to integration of Indigenous knowledge extend far beyond the technical problem of engaging a more

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107 Name has been changed for privacy.
109 Ibid.
inclusive form or science.” Part of being a non-Indigenous ally to requires giving room for the expression of all identities.

Meanings and Healings

Looking at the big picture, what does the restoration of the Elwha River truly mean? The ONP crewmembers explained their roles in the restoration of the river valley to me in very similar ways. They shared “how lucky” they felt to have the chance to witness the project and participate in the area’s regrowth, speaking notably about how the project was “a learning opportunity” for them and the whole world, a chance for those in power to recognize that past wrongdoings can be made right. As Kim Sager expressed:

I think it’s a shining example for other potential projects and overall, I just think when Europeans came west, we really screwed stuff up and we’re still screwing stuff up in a huge way on a global scale. But if we can have one sort of shining example of us trying to reverse the course of the damage that we’ve done, that’s good. It’s good for the spirit, it’s good for everybody to see that maybe we can reverse some of our damage.111

The equating of restoring the Elwha watershed as a “shining” example of right action in the wake of so much injustice – to both the LEKT and the river system itself – mirrors the rhetoric of reparations, though this word was never explicitly used in any of the interviews I conducted. As Senator Bill Bradley remarked in a similar tone during a dinner celebrating the Elwha Dam removal on September 16, 2011:

Each of us owes the Lower Elwha Klallam Tribe the greatest possible gratitude for their unceasing efforts over decades to bring back the River’s life. To tell us all what the River needed. And we owe the Tribe the greatest deference and respect for the burdens its people and society have borne because of what was done to the River 100 years ago.112

112 Guarino, "Tribal Advocacy and the Art of Dam Removal," 144.
Among those I spoke to, a fully restored Elwha river was represented as part and parcel of a more just future, especially for the LEKT. Notably absent from this depiction of a better world, however, was a mention of the other necessary steps for ensuring this just future. Federally recognized tribes in the United States face economic, social, and political problems due to ongoing disenfranchisement within settler society, a fact frequently referenced by ONP staff as a key reason why tribal members did not seem to care as much about environmental issues. The failure on the part of restoration practitioners to acknowledge the social and material realities of Indigenous communities limits their ability to cultivate the deeper understanding necessary for the long-term relationship building that effective co-management relies upon.

The most promising aspect of the restoration project pertaining to the LEKT is the future for the project lands located outside of ONP that contain the former site of Lake Aldwell. Every person I spoke to on the ONP side of the project indicated support for the repatriation of the Lake Aldwell project lands to the tribe, agreeing that it was only right for the tribe to get these lands back, especially considering that the lands contain the tribe’s creation site. Tribal ownership of ancestral lands would provide the LEKT with new options for economic growth as well as greater capacity to protect and conserve the Elwha River. Moreover, it would set a radical precedent for ecological restoration, in which “healing” comes to include the repatriation of

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ancestral lands and the renewed right for tribes to manage said lands as they see fit. The bureaucratic process of land transfer, however, is expected take several years.\textsuperscript{115}

When asked about how satisfied the LEKT was about the project as a whole, Robert Elofson noted, “this was the number one priority of the tribe for over 20 years and we got it done and the parks service paid for it, most of it, so I’m not gonna complain.”\textsuperscript{116} He continued:

“It’s the tribes position that we hope to see it restored to its pre dam conditions and that the salmon can return to areas they went to before the dams were built. We consider it would be sad to do this much on the river and not complete the restoration.”\textsuperscript{117}

Though salmon have not emerged in the desired numbers anticipated and expected by virtually everyone in support of the dams’ removal and river restoration, Elofson notes that this will not impact the LEKT’s resolve to do everything in their power to bring about a healthier Elwha. Elofson noted, “as a tribal people working to make change in your ancestral homeland, you are not going anywhere, and you have a long time to get things done.”\textsuperscript{118}

The future repatriation of the Lake Aldwell project lands to the LEKT raises the question of whether ecological restoration practice can be understood as a form of restorative justice. No land reparations for past and ongoing settler colonial injustice have been distributed to the Indigenous peoples of the United States. Even in celebrating small victories that involve greater consideration of rights of the Indigenous peoples of the United States, we must remember that decolonization is not

\textsuperscript{115} Ibid.
\textsuperscript{116} Ibid.
\textsuperscript{117} Ibid.
\textsuperscript{118} Guarino, "Tribal Advocacy and the Art of Dam Removal," 145.
a metaphor and true “decolonization, as a process, would [fully] repatriate land to Indigenous peoples.”

Ultimately, it is virtually impossible to engage in productive partnerships if participants do not attend to the complex histories, meanings, and narratives that inform contemporary relationships in place. While this chapter has sought to demonstrate the limitations of effective collaboration between Olympic National Park and the Lower Elwha Klallam Tribe, it also highlights the immense potential these partnerships can have in distributing resources and bringing about necessary material changes in the landscape. Though messy, these examples of pursuing different ways of being in place together demonstrate the potency of ecological restoration practice as a site for intervention.

CHAPTER 2: The Moses Prairie Restoration Project

Figure 5. Map of the Quinault Indian Nation reservation relative to Washington State. Moses Prairie is in the upper Northwest corner of the reservation, near Queets.¹

On a July morning in 2017, I was brought to visit Moses Prairie by Cavin Park and Justine James, two members of the Environmental Protection department of the Quinault Division of Natural Resources (QDNR). Cavin and Justine, both Quinault tribal members and clad in field gear, greeted me with a warm hug before we hiked out onto the prairie, the site of the Moses Prairie Restoration Project. It was an overcast day, common for the Olympic Peninsula, a slight breeze rustling the small

green plants covering the saturated ground. With each step, my hiking boots sunk
with a *squish* into ankle deep mud, water flooding my socks.

Located about two hours south of Port Angeles, WA, Moses Prairie is the only
prairie on the Quinault Indian reservation that the Quinault Indian Nation (QIN) owns
in entirety— the others are patchworks of tribal and non-tribal ownership. On first
glance, Moses Prairie doesn’t look particularly special and could be easily
disregarded as a soggy forest clearing. But however unassuming it may be, the 200-
acre prairie is a living artifact of thousands of years of anthropogenic fire. The prairie
ecosystems on the Olympic Peninsula aren’t the conventional “prairies” that initially
pop up in one’s imagination, with billowing golden grass and grazing cows. They are
wet, boggy grassland openings in the middle of mature conifer forests of western red
cedar, Douglas fir, and western white pine.²

![Moses Prairie](image)

Figure 6. Moses Prairie, personal photograph, July 2017

² See Figure 6.
As we walked further out into the wide-open reaches of Moses Prairie, Justine, the Cultural Resource Specialist for the tribe, stopped and directed my attention to the ground, where a bundle of small bog cranberries rested on the moist yellow moss. Both he and Cavin have the gruff sensibility of men who spend a good portion of the workday tromping through thickets of forest, but are incredibly kind and excited to share their knowledge with any and all who are interested. Our journey continued like this, with Justine, his thick black mullet tucked under a QNDR baseball hat, pointing out plants of interest that we stumbled upon as Cavin eagerly rambled on about their ecological importance: Indian tea (a plant with fuzzy, yellow leaves that are brewed in medicinal teas), beargrass (a small grass used for weaving and other textiles), and camas (a starchy root vegetable with a dark purple flower).

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3 See Figure 7.
We continued across Moses Prairie until we reached the fire line: the boundary for the experimental burn conducted by the QDNR on September 15, 2016. The difference between the untouched and burned land was immediately noticeable, even to my untrained eye. On one side of the line, the shrub growth was unruly, with dead branches and twigs covering most of the ground. On the other, the soil was darker and the plants smaller, but with much more room to grow without the overgrown thickets of myrica gale and great burnett.

Within the larger political atmosphere of continuing fights for tribal sovereignty, as tribes struggle to regain a place in public discourse regarding appropriate uses of the environment, the Quinault Indian Nation’s efforts to restore
fire to Moses Prairie is powerful. Significantly, the project isn’t striving for an ecological baseline of a lofty, fictitious wilderness ideal. Nor is it attempting to recreate or return to a determined ecological state. Rather, it is creating a new baseline, in which the Quinault people can once again be empowered agents in their relationships to their land, rediscovering, re-engaging, and reconfiguring longstanding cultural practices long forced into amnesiac corners. A project to relearn and remember while adapting to build new futures, burning away the overgrown layers until there is, once again, room to grow.

In this chapter, I explore what it means for the Quinault Indian Nation to restore a cultural tradition and practice in the landscape. I start by telling stories about how Quinault management techniques, including the use of anthropogenic fire, shaped the meanings of these prairies. I argue that forced agricultural assimilation programs and restrictive United States fire policies served to limit and undermine the Quinault peoples’ historic relationships to the landscape. Responding to these histories of place, I argue that the Moses Prairie Restoration project is a radical example of how ecological restoration can involve reasserting and reconfiguring historic land management practices as part of larger goals for community empowerment and self-determination.

The Prairie System

In this section, I discuss the prairie systems’ ecological and management histories. The Quinault prairies are peat-based wetlands found within a temperate rainforest landscape dominated by Sitka spruce, Western hemlock, and Western red cedar. This region of the Olympic Peninsula receives over 100 inches of rainfall.
annually, the most in the lower 48. The prairies contain a diverse array of plants, many of which are rare or endemic to areas of higher elevation, such as the Quinault Fawn Lily (*Erythronium quinaultense*). Moreover, many of the plant species found in the prairie are staple foods, textiles, or medicines for the Quinault, such as camas (*Camassia quamash*), bear-grass (*Xerophyllum tenax*), and bog cranberry (*Vaccinium oxycoccos*).

During a climatic cooling trend 3,000-4,000 years ago, the formerly dry prairie plains of the Olympic Peninsula were transformed into thick bogs and, eventually, into the dense conifer rainforests characteristic of the region today. The paleoecological record of the Olympic Peninsula estimates that the earliest burning of the prairies took place around 3,500 years ago by ancestors of the Coast Salish peoples, around the time when conifers were beginning to encroach on the open dry prairies.

Paleoecologists suspect that the Coast Salish began burning back the invading tree line with frequent low-intensity fires to keep the prairies open and clear of brush and woody species. In doing so, they were able to promote plant species of interest (used for food, medicine, or textiles), increase visibility for harvesters, and maintain grazing habitat to attract herd species for hunting. Justine James noted that “building knowledge generationally,” allowed the Salish peoples to develop a

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7 Though this chapter focuses on burning practices done by the Quinault and other Coast Salish peoples of the Olympic Peninsula, anthropogenic burning is recognized as a land management practice for many Indigenous peoples within and outside of North America.
sophisticated, complex, management regime that facilitated peoples’ use of the landscape.\textsuperscript{8}

Knowledge from the Quinault elders explains that the Quinault prairies were “burned late in the summer or early in the fall” and burned in patches.\textsuperscript{9} Just as Coast Salish families were known to have hunting and fishing grounds, Quinault families held grounds on the prairie that they would harvest from and maintain.\textsuperscript{10} Though not entirely congruent with rigid Western notions of property, individual families each “administered a patch and… were expected to burn it every couple of years.”\textsuperscript{11} Via this patchwork system, “the entire prairie would be burned over bit by bit, here and there, and about every 5 years, the entire prairie would have been burned and replaced.”\textsuperscript{12}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{moses-prairie-burn-line.jpg}
\caption{Aerial image of Moses Prairie surrounded by secondary growth forest, with the burn line distinctly visible, taken by Tanya Eison, courtesy of the QDNR, 2016.}
\end{figure}

\begin{itemize}
\item \textsuperscript{8} Justine E. James, interview by Olivia Won, July 21, 2017, Queets, WA.
\item \textsuperscript{9} Cavin Park, interview by Olivia Won, February 1, 2018, Middletown, CT.
\item \textsuperscript{10} Martorano, "The Moses Prairie Project," 10.
\item \textsuperscript{11} Park, interview, February 1, 2018.
\item \textsuperscript{12} Ibid.
\end{itemize}
Over time, as a result of this regular burning, the prairies lived on in spite of climatic change, saved from extinction by human hands. Regular burning created environmental mosaics of different successional phases, resulting in a diverse landscape that had reciprocally adapted to frequent, low-intensity burns. Contrary to popular belief, fire does not inherently devastate the land, but can actually nourish it in vital ways when disturbances are frequent and controlled. This is evidenced by the fact that many plant species found within the prairie have evolved to benefit from fire disturbance: Bracken fern, Indian tea, huckleberry, and bog cranberry all have deep rhizomes, allowing the plants to survive fire and quickly regenerate. The ash from the fire provides vital nutrients to the plants and results in “more favorable growth forms,” including higher fruit yields and less bushy plants. Furthermore, fire aids in clearing away invasive shrub species such as great burnet and myrica gale, which tend to overcrowd and limit the growth of more valuable species like camas. Thus, through the use of fire, the Indigenous peoples of the Olympic Peninsula were not only altering the material landscape, they were also directing evolutionary change in the gene pool of certain species so they would become adapted to fire.

According to Justine, in the old times, “the prairie was like a grocery store,” where important subsistence plants were cultivated strategically for regular harvest. The prairies were burned with the explicit goal “to ensure that camas and other

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13 See Figure 8.
16 James, interview, July 21, 2017.
favorite species, such as berries and ferns would grow.”\(^{17}\) The intentional manipulation of both plants and their environments reflects an obviously specialized and sophisticated method of plant resource enhancement. Though there remain ambiguities about what technologies “count” as forms of agriculture, cultivation is now commonly associated with activities such as,

The seeding or transplanting of propagules (i.e., the parts of plants such as seeds, bulbs, or fragments of rhizome, capable of regenerating into individual new plants), the intentional fertilization or modification of soils, improvements of irrigation or drainage, and the clearing or “weeding” of competing plants.\(^{18}\)

The failure on the part of anthropologists and historians to recognize and document the land practices of Coast Salish peoples as mechanisms of “plant cultivation” reflects long held Eurocentric biases within representations of non-western plant management.\(^{19}\) Cultivation was equated with European agricultural practices. Settlers’ accounts of Indigenous resource use suggested that “the potential for plant cultivation was not apparent to the region’s Indigenous peoples” and dismissed the Coast Salish as “non-agricultural, sedentary fisherfolk.”\(^{20}\) The depiction of Coast Salish peoples as non-agricultural demonstrates the settler colonial logic of the Western United States as “empty land awaiting settlers’ cultivation and, with it, legitimate ownership claims.”\(^{21}\) These justifications of “empty land” still circulate in

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\(^{17}\) Wray, *Native Peoples of the Olympic Peninsula*, 115.
\(^{19}\) Ibid., 5.
\(^{20}\) Ibid., 3, 14.
the present, in the form of ongoing refusals by settler society to acknowledge the extent and complexity of Indigenous land management systems.

Beyond its uses for nourishment, Moses Prairie was also an important site for sociality. Members of the Quinault and other surrounding tribes would gather as part of a network of seasonal rounds, in which people would camp in different areas to hunt, fish, and live.\textsuperscript{22} During the summer months, it was common for families to move to the prairie for an extended time to harvest foods and gather materials that would support them through the winter months.\textsuperscript{23}

In 1885, the Quinault and other Salish tribes signed the Treaty of Olympia with territorial Governor Isaac Stevens. The treaty ceded to the United States nearly one third of the Olympic peninsula, an estimated 1.2 million acres in exchange for a “tract or tracts of land sufficient for their wants” and guarantees such as the “right of taking fish at all usual and accustomed grounds and stations.”\textsuperscript{24} Today, the Quinault Indian Nation manages a reservation of 204,000 acres.\textsuperscript{25} Despite treaty guarantees, acts designed by the U.S. Federal government to undermine tribal sovereignty resulted in the loss of Quinault reservation land. In 1887, following the passage of the Dawes (Allotment) Act, tribal trust land was fragmented into individual allotments and most of the Quinault land was allotted to individuals.\textsuperscript{26} Although initially most of the allotments were owned by Quinault tribal members, by 1965, approximately 25%

\textsuperscript{22} Martorano, "The Moses Prairie Project," 10.
\textsuperscript{23} Ibid.
\textsuperscript{24} Wray, \textit{Native Peoples of the Olympic Peninsula}, 116.
\textsuperscript{25} Linda Moon Stumpff, "The Last Stand: The Quinault Indian Nation’s Path to Sovereignty and the Case of Tribal Forestry," (Enduring Legacies: Native Case Studies: Evergreen State College, 2007).
of the current reservation, went into non-Quinault, primarily timber company ownership. The dominance of commercial forestry in the region brought about drastic changes in land use patterns, resulting in a checkerboard pattern of clear-cuts on Quinault land. The signed treaties supporting tribal governance were undermined by the results of individual allotments, which separated tribes from total control over their natural and cultural resources.

Along with the dispossession of land came assimilationist policies oriented around the “logic of elimination” described by Patrick Wolfe. In the early 1860s, a Bureau of Indian Affairs (BIA) boarding school was constructed in Taholah, in which the federal government aimed to separate the Quinault people from their lifeways via instruction in the English language, Western religion, and Western agricultural practices. These “destroying to replace” policies sought the absolute dissolution of Indigenous societies by imposing Western practices and severing Indigenous practices. Even land that belonged legally to sovereign tribal nations was to be “disciplined and regulated, harnessed to the imperative of imperial development.”

This necessary regulation and control was achieved “not through self-regulation or self-discipline, but by paternalistic external imposition” of Western management regimes to “maximize” human benefits from nature, namely through agriculture.

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27 Stumpff, "The Last Stand: The Quinault Indian Nation’s Path to Sovereignty and the Case of Tribal Forestry."
28 Ibid.
29 Wray, Native Peoples of the Olympic Peninsula, 121.
30 Wolfe, "Settler Colonialism and the Elimination of the Native," 388.
31 Adams and Mulligan, Decolonizing Nature, 43.
32 Ibid.
Agriculture has a long history as a tool used by colonial powers to convert landscapes to Western standards and as a means of assimilation. As Val Plumwood argues, “traditional devaluing attitudes associated with colonization encouraged Eurocentric nostalgia for the European homeland,” resulting in numerous efforts to “civilize” the native with farming.\textsuperscript{33} As Justine noted to me,

> The homesteaders and the government didn’t care enough to understand what the people were already doing here, that there was a kind of cultivation already going on. They just tried to push the model of European agriculture and stopped us from burning [the prairies], because they thought they knew best. So much for outer wisdom.\textsuperscript{34}

Following the Allotment Act, some Quinault practiced small-scale agriculture after the reservation was established and they lost access to traditional resources found in the prairies.\textsuperscript{35} Once private ownership prevailed, traditional burning practices were inhibited and discouraged by settler society. These cultural changes are reflected in the increased tree establishment into previously open-canopied areas on the Peninsula following the treaties.\textsuperscript{36} Because regular usage of the Quinault prairies stopped around the early 1900s due to white incursion and settlement in the region, there is a lack of detailed records about how people interacted and managed these areas.\textsuperscript{37} As “traditional patterns of ownership have been severely disrupted by

\textsuperscript{33} Ibid., 75.
\textsuperscript{34} James, interview, July 21, 2017.
\textsuperscript{35} Wray, \textit{Native Peoples of the Olympic Peninsula}, 114.
\textsuperscript{36} Shebitz, "Weaving Traditional Ecological Knowledge," 61.
European colonization,” the exact management practices are sometimes difficult to entirely discern.\textsuperscript{38}

Politics of Fire

This section dissects the concept of fire as an Indigenous technology for landscape management and a symbolic threat mobilized by the United States to promote nationalistic ideologies. Fire embodies multiple material and social meanings, particularly in the context of the United States. In his work on the political lives of forests in New Mexico, Jake Kosek chronicles the political history of fire, U.S. imperialism, and western settler expansion and how these forces informed resource management policies and ideologies. Forests have long been associated as a symbol for the economic wellbeing of modern society, with fire, of any kind, serving as the primary threat.\textsuperscript{39} In this way, fire was a “powerful site for the projection of society’s fears” such that “fire was often understood as being used by racial or radical ‘others.’”\textsuperscript{40} Fire prevention on all lands, including those under private, “public” or Indigenous jurisdiction, came to be discursively entangled with racist sentiments designed to bolster the white supremacist, imperialist state.\textsuperscript{41} As F.E. Olmsted, district forester for California, remarked in 1911, “the old Indian fires in California alone [have] reduced over 2,000,000 acres of valuable timber lands to non-productive wastes of brush.”\textsuperscript{42} This statement demonstrates how land managers simultaneously

\textsuperscript{38} Deur and Turner, \textit{Keeping It Living}, 154.
\textsuperscript{39} Kosek, \textit{Understories}, 190.
\textsuperscript{40} Ibid., 191.
\textsuperscript{41} Ibid.
1) invalidated Indigenous land management practices by dismissing carefully maintained landscapes as “non-productive” in support of the myth of an empty continent and 2) linked Indigenous fire with a backwards past fundamentally incompatible with the interests of the modern settler-state.

At the turn of the century, as the Forest Service became defined more and more by the precepts of scientific management, utilitarian conservationist Gifford Pinchot made fire suppression a central priority for the forest rangers, describing fire as the “dragon of devastation.” Given how destructive fires can be to human settlements, Pinchot proposed that preventing them was the best management practice, in spite of the fact that many forest systems require regular fire disturbance for normal cycles of ecological function. To popularize this anti-fire strategy, Pinchot linked anxieties about fire with anxieties about the nation’s resources being threatened by racial others: “there is no doubt that forest fires encourage a spirit of lawlessness and a disregard for property rights.” This discursive linkage between hostile racial otherness and fires remains alive and well within contemporary forestry: in 2000 a former regional forester in the Southwest argued that, “there is a long history of close association between social degenerates and wildfires.”

In this light, fire suppression was clearly tied to settler colonial logics, which sought to justify the exclusion and erasure of Indigenous peoples from the landscape. The prohibition of fire can be understood as a tool to undermine the epistemic validity of Indigenous knowledge systems and lifeways through the prioritization and forced

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43 Kosek, Understories, 190.
44 Ibid.
adaptation of colonial landscape management regimes. In the characterization of the landscape as devoid of human management, the human role in shaping ecosystems was made invisible and the myth of “empty wilderness” bolstered the settler state.

These management practices were informed by the WESK idea of the “ecosystem” as a static and self-regulating entity, entirely distinct from human intervention. Part of the logic of an anti-fire ethos in forest management came from western plant ecology, which believed that “systems conserved and isolated from direct disturbance will maintain themselves in the desirable state for which they were originally conserved.”46 Within this guiding framework, resource managers promoted a static approach to land management, supporting the idea that unique habitats and ecosystems would be maintained if human use was disallowed. Thus, the earliest land managers “were bent on excluding all fires from parks and wilderness areas.”47

As a result of the fireless years, the prairie systems of the Olympic Peninsula started to shrink, threatened by encroaching forest and neglect. Even on lands still owned by tribal members, traditional practices of burning the land were explicitly forbidden by settler society because of anxieties about being unable to control the fire and the threats of this practice to non-tribally owned property and resources. In spite of thousands of years of experience and knowledge, Salish peoples were forced to adopt and adhere to ignorant settler logics of land management. Materially, this manifested in prairies with overgrown brush and less clearly defined edges due to tree

47 Stewart, Forgotten Fires, 40.
establishment associated with successional dynamics, resulting in decreased cultural keystone species production and lower quality hunting conditions.

A number of the prairies on the Olympic Peninsula have fully disappeared, the careful products of generations of labor, lost. Thus, the loss of fire in some ways contributed to a kind of forgetting in the actual prairie environment, such that over time, the landscape strayed further and further from its carefully managed state. As the human interactions with the prairies were forgotten due to settler colonialism and associated cultural erasure, the meanings of the prairies changed as well, reflecting the ways in which social forces have ecological consequences for place meaning.

Within WESK, ecosystems are characterized by keystone processes involving their various abiotic and biotic components. Given how these prairie systems came into being, anthropogenic burning could be understood as a cultural keystone process— or a cultural practice critical to the formation of place-based identities and belongings. As Lecompte-Mastenbrook argues, Indigenous fire “is not simply a chemical reaction or a component of biological processes that can be separated from human meanings… [Moreover, it is] not simply another agent of disturbance – within that agency is attached a suite of social relations.” Without a given cultural keystone process, there will be “cascading social effects” on the human and more-than-human relationships in the landscape. Thus, settler state sanctioned fire suppression is understood by many Indigenous peoples to be a larger threat to sovereignty and autonomous cultural practices:

49 Ibid.
Denied access to cultural practices of burning is an issue of political sovereignty because [it interferes] with the [federally recognized tribe’s] ability to continue the cultural practices necessary to maintain this legal standing. Continued fire suppression damages the ecological functions and diminishes the availability of and access to cultural use species. Similarly, because fire suppression as well as firefighting activities interfere with the ability of [tribal members] to perform their cultural practices, these activities hold the potential to erode [tribal] sovereignty over tribal lands and cultural resources.\(^{50}\)

Reviving the practice of burning prairies, then, carries larger implications for naturecultural relations to the landscape as informed by the past and present.

**Paths to Restoration**

This section aims to describe how the restoration project fits within the tribe’s efforts for greater autonomy and reinvigoration of Indigenous management and knowledge practices. Significant to the story of the Quinault Indian Nation is its ongoing quest for sovereignty and self-governance. The Quinault decided to structure itself apart from the BIA, establishing a precedent for the tribe’s commitment to political sovereignty over its lands. As former Quinault president Joe DeLaCruz argued,

> No right is more sacred to a nation, to a people, than the right to freely determine its social, economic, political and cultural future without external interference. The fullest expression of this right occurs when a nation freely governs itself. We call the exercise of this right self-determination. The practice of this right is self-government.\(^{51}\)

The Quinault Nation was one of the first six tribes in the Self-Governance Demonstration project in 1990, allowing insulation from budget reductions stemming

from BIA politics. Various concerns of land ownership and management such as trespass enforcement, protection, timber management, forest restoration, and development came to rest fully in tribal hands. Moreover, the tribe could “emphasize Indian employment through its ordinances and add employment requirements benefiting tribal hiring for contractors” in order to rely less upon non-Quinault employees.\footnote{Stumpff, "The Last Stand: The Quinault Indian Nation’s Path to Sovereignty and the Case of Tribal Forestry."} As of today, the QIN is the largest employer in Grays Harbor County, with QIN enterprises supplying more than 1,200 jobs.\footnote{Walker, "10 Things You Should Know About the Quinault Nation".}

In the pursuit of greater sovereignty, federally recognized tribes must build strong environmental governance apparatuses for monitoring and controlling their natural resources for longevity, in order to reduce reliance on external agencies. The Quinault Division of Natural Resources (QDNR) is comprised of a team of almost “90 professional scientists, field technicians, program managers, administrators and support personnel” that oversees “timber stewardship and harvest, freshwater and ocean fisheries, wildlife, cultural resource protection, sand and gravel production, and air and water quality.”\footnote{Quinault Division of Natural Resources, “Quinault Department of Natural Resources- Quinault Indian Nation " http://qlandandwater.org/} Within the QDNR, the Environmental Protection unit focuses on ways to sustainably manage the tribe’s resources. Examples of this unit’s work include the long-term restoration of the Quinault sockeye, an evolutionarily significant subspecies of sockeye salmon. The strategies of this project include restoring floodplain forests, which, as demonstrated in the previous chapter, are important for salmon population health. A more immediate concern of the QIN is

\footnote{52 Stumpff, "The Last Stand: The Quinault Indian Nation’s Path to Sovereignty and the Case of Tribal Forestry."} \footnote{53 Walker, "10 Things You Should Know About the Quinault Nation".} \footnote{54 Quinault Division of Natural Resources, “Quinault Department of Natural Resources- Quinault Indian Nation " http://qlandandwater.org/}
planning for projected sea level rise and taking measures for relocation plans for the sea-level village of Taholah.

What is being restored?

Unlike most ecological restoration projects, which tend to remove Indigenous people from the narrative, the Moses Prairie Restoration Project sought to restore Moses Prairie to a “cultural landscape” by reintroducing prescribed burning. The project sees the prairie, in junction with the rest of Quinault land, as an explicitly anthropogenic landscape and suggests that traditional practices can and should be the primary components of environmental restoration efforts.\(^\text{55}\) This is radical because, within most restoration projects that involve human relationships, “Indigenous practices are noted but not considered as [a consequential] part of restoration programs.”\(^\text{56}\)

Moreover, though there is extensive research on traditional knowledge of fire and its uses in the west, this is one of the only projects that I’ve encountered in my research that situates prescribed Indigenous fire as a modern technology belonging in the present and the future. Very few ecological restoration projects explicitly address cultural objectives or deliberately refer to Indigenous management practices.\(^\text{57}\) In this sense, the Moses Prairie Restoration Project is a unique example of restoration that “considers the linkages between the practical aspects of Indigenous land use and

\(^{55}\) Park, interview, February 1, 2018.
\(^{56}\) Stewart, *Forgotten Fires*, 28.
necessary management regime to ensure the sustainability of resource use into the future."\textsuperscript{58}

Moses Prairie was chosen for the first experimental burn because “it was pretty big, pretty well known, easily accessible, [and] pretty much all of it is owned by the [Quinault Indian] nation.”\textsuperscript{59} The specific section designated for the burn had been flooded when a logging road was built. Because it had been inundated by water, trees were kept from encroaching onto the prairie, rendering it “more akin to pre-treaty prairies because it was kept tree-free by a different kind of human influence… almost as if the burning hadn’t stopped.”\textsuperscript{60} As stated in the report, the project’s goals were to use an experimental controlled fire to decrease the abundance of woody species (like myrica gale and great burnett) to increase abundance of culturally significant plants to the tribe, such as beargrass and camas.\textsuperscript{61} Still, for those planning the project, it was less about getting Moses Prairie to produce “more camas or more cranberries… [it was] more about bringing the traditions back.”\textsuperscript{62} For Cavin in particular, the primary goal was to see what would happen and to see if bringing back the practice would match up with historical fire records.

The funding for the project, including the pre-burn baseline study and the burn itself, came from a $64,000 grant from the Washington Coast Restoration Initiative and The Nature Conservancy.\textsuperscript{63} Caroline Moratano, lead coordinator and manager for

\textsuperscript{58} Stewart, Forgotten Fires, 55.
\textsuperscript{59} Park, interview, February 1, 2018.
\textsuperscript{60} Ibid.
\textsuperscript{61} Martorano, "The Moses Prairie Project," 10.
\textsuperscript{62} Park, interview, February 1, 2018.
\textsuperscript{63} Northwest Treaty Tribes, "Prairie Burns Return to Quinault," Northwest Treaty Tribes https://nwtreatytribes.org/prairie-burning-returns-quinault/.
the project, noted that when the QDNR originally applied for the grants, the idea of restoring fire to the prairie wasn’t planned at all and “nobody really expected [the project] to be funded.” The other core individuals involved in the project were Cavin Park, Forest Practices Technician with the QDNR, and Justine E. James, Cultural Resource Specialist with the QNDR. When Caroline pitched the idea to him, Cavin noted that he was the first Quinault tribal member she spoke to that was “actually excited about [the project] instead of just showing confusion or apathy.”

Because of the project’s explicitly cultural bent and the QDNR’s goal to serve the Quinault community first and foremost, moving forward with restoring Moses Prairie began with community outreach. Caroline explained that this included conducting interviews with elders, writing articles about it in the paper, and organizing a community dinner in Taholah, the main town on the reservation. These initiatives were primarily “to get the word out there about this project and provide any opportunity for anyone in the community to say ‘no, don’t do this, It’s such a beautiful, pristine part of the reservation I wouldn’t want that to be messed up.’”

The community dinner in Taholah served both to gauge people’s thoughts and reactions but also to offer a “positive contribution to the community,” as Caroline put it. According to Justine and Cavin, the community’s response to the team’s presentation of the project was overwhelmingly positive, in spite of many expressing confusion about what exactly prescribed burning is and why it is necessary. Though tribal members hold harvesting rights on Quinault lands, much of the knowledge

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64 Caroline Martorano, interview by Olivia Won, August 23, 2017, Oakland, CA.
65 Park, interview, February 1, 2018.
67 Ibid.
about managing the prairies they harvest upon has been faded from collective memory. Still, there was broad excitement among community members about the revival of traditional practices, many of which they hadn’t themselves experienced. Some of the elders (who were old enough to remember stories from their elders when they were children) excitedly told the project team about how their families used to own and burn portions of the prairie. On the more wary side, there were a few tribal members who expressed anxieties about the burn, mainly out of concern for adjacent timber stands and private property. Still, no one expressed outright opposition to burning the prairie for cultural reasons.  

The loss of knowledge about Indigenous fire in the Quinault community occurred hand in hand with the loss of other culturally important practices, like the language and other traditional lifeways. Justine’s great-grandmother, trained as an oral historian, was one of the people tasked with ensuring that knowledge about the world, the plants, and how to interact with it would be passed down to younger generations. Her generation was one of the last to speak the Quinault language fluently, and likely also the last to have the known the specifics of how the prairies were traditionally managed. Moses Prairie is called by its settler name because the Quinault name was lost over the last generations. In this sense, part of the significance of the project comes from its role as collective restoration: as Caroline said, “besides the ecological part, getting people to talk more about it is a kind of relearning, relearning by bringing back the practice [into collective consciousness.]”

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68 Park, interview, February 1, 2018.
69 James, interview, July 21, 2017.
70 Martorano, interview, August 23, 2017.
On the day of the burn, tribal members said a prayer before setting the ground ablaze for the first time in 150 years. Only a small portion of the southernmost tip of the prairie was burned: 16.5 out of the 200 acres. It went better than anyone could have hoped: the fire stayed within the boundaries of the fire line and was extinguished after about an hour without any difficulty. Joyce LeCompte-Mastenbrook described it to me as a truly awe inspiring, emotional, and beautiful thing to behold. No one present that day had ever witnessed a burn or even heard direct stories of past burns, but it felt natural, to watch the earth begin to char in the flickering of the fire, as if the land had been waiting for the flames to return. It felt so profoundly right, Joyce told me, to be returning fire to Moses once again.

Figure 9. Drone footage from experimental burn, courtesy of the QIN, 2017.

Originally due to the dwindling grant money, the QDNR hadn’t planned to monitor long-term vegetative growth. Because the project generated so much interest within the Quinault community, the QDNR biologists have prioritized research into the vegetation response with the help of interns from the Doris Duke Conservation

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71 James, interview, July 21, 2017.
73 See Figure 9.
74 Lecompte-Mastenbrook.
Scholars Program at the University of Washington. From their preliminary monitoring data, the project team has found that the project’s objectives— to decrease the abundance of woody species and increase abundance of culturally significant plants —were accomplished. Though experimental results were never necessarily the purpose of the burn, being able to back up the project with statistically significant results is important for ensuring that the QDNR will be able to get grant funding for any future burns. As Cavin noted, “this isn’t an experiment so much as it’s trying to reintroduce something.” Still, because the QIN does not have the internal funds for these kinds of restoration projects, it remains “necessary for now” to meet the expectations of funders.

Though no tangible plans exist as of yet, following the success of the first burn, the QDNR intends to burn more of Moses Prairie as well as the other prairies on the reservation. Ensuring the longevity of the practice into the future is understood to be essential for any real restoration of relationships to the prairie. As Cavin noted, statistically significant results of vegetative community change are less important than “real visceral results” that are more obvious to the untrained eye.

Those who I spoke with about the project all expressed that they want the experimental burn to serve as an example to help other tribes in the region move forward with plans to restore their own prairies, namely the Ozette prairies in Olympic National Park. Learnings from the project can help inform many different communities (other Washington state tribal communities, the ecology community, the

75 Park, interview, February 1, 2018.
76 James, interview, July 21, 2017.
77 See Anderson (2009).
conservation community, and the fire community), but this information fundamentally belongs to the Quinault people. Given longstanding histories of appropriations and exploitation of Indigenous knowledges, sharing knowledge about the project is a choice belonging only to the QIN.

**Meanings and Healings**

One year after the burn, the people behind the project told me that they felt incredibly proud of the work they had done. Caroline said it was “probably the coolest thing [she’d] ever do” and noted that it fundamentally changed how she understands ecological work: “[The project] taught me a lot about people and how everything we do is related to people… I got into botany because I thought I liked plants but it turns out that it’s all about people.”

Cavin thinks that the project represents “a good turning point” for ecological restoration, by “acknowledging something [Indigenous land management practices] that [the field had previously] refused to acknowledge.” More personally, Cavin said the project represents Quinault resilience in the face of historical and ongoing oppression:

> They tried to beat [the practice] out of us, they kidnapped our ancestors as children and carted them off to boarding schools to beat the culture out of us. That’s what it is to me, it’s a big ‘f you’ to them, the U.S. government, white supremacy, corporations, whatever you want to call them.

The larger conservation community’s reactions to the burn demonstrate that the deeper layers of meaning embedded in the burn are visible to non-Indigenous allies as well. Cavin remembered that the main person from the Center for Land Management administering the Moses Prairie burn “was almost in tears about how

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78 Martorano, interview, August 23, 2017.
79 Park, interview, February 1, 2018.
excited he was to help Native people bring fire back to the prairies, rather than just instituting prescribed fires in prairies around the [Puget] Sound.”

Even the Nature Conservancy’s write-up about the burn suggested that the burn carried “decolonizing implications:” they argued that the burn was helping to “peel back a layer of colonization that happened on this landscape, [which] while small, made [the project] all the more potent.”

Nevertheless, though the project seeks to facilitate and encourage renewed use of the prairie by the Quinault community, it is clear that one burn, even if it is a distinctly Indigenous burn, is not nearly enough to bring about the widespread resurgence of prairie harvesting or usage. The settler colonial apparatuses that facilitated the prairies’ disappearances from the Olympic Peninsula—most notably the deprioritization of Indigenous knowledges and disruption of trans-generational knowledge dissemination as a result of forced assimilation—remain ever present. Still, in spite of settler society’s assumptions that these lifeways have disappeared from modern Indigenous life, “subsistence— as an approach to interacting with the land, with each other, and with non-human persons—persists… despite a relatively high level of participation in wage labor and the market economy.”

According to Caroline and Cavin, the prairies on the Quinault reservation are widely used by tribal members for hunting deer and elk. Cavin thinks that in order “to really get [regular

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80 Ibid.
82 Clint Carroll, Roots of Our Renewal: Ethnobotany and Cherokee Environmental Governance, First Peoples (Minneapolis: University of Minnesota Press, 2015), 142.
harvesting] going, we’ll really have to push some kind of cultural thing like have harvest days.”

The settler colonial structures that inhibit tribal sovereignty in everything from food systems to natural resource management are ever-present and need to be explicitly addressed in order for the more radical implications of the project—reviving Indigenous food systems and reinstituting Indigenous land management practices—to be realized. Though the Moses Prairie Restoration Project has been lauded as a path towards decolonization, burning a prairie once is simply not enough to make traditional relationships to the land relevant or feasible for Quinault people in the present and future. Though perhaps not practiced with the regularity desired, contemporary forms of these practices at Moses—occasional harvesting and regular hunting—are critical sites in which cultural reproduction occurs. In his work on environmental governance on Cherokee lands, environmental historian Clint Carroll argues that subsistence activities like these “aid in the transmission of vital cultural knowledge when carried out collectively.”

Yet, reactions in the fire ecology community have not all been explicitly supportive of project. The refusal on the part of ecologists and land managers to recognize Indigenous fire ecologies “can be experienced as yet another instance of neo-colonial ‘epistemic imperialism.’” For instance, even though the Moses Prairie Restoration Project is being celebrated as an example of encouraging more ecologically-balanced fire practice, ecologists are still reluctant to acknowledge that

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83 Park, interview, February 1, 2018.  
84 Carroll, *Roots of Our Renewal*, 142.  
85 Lecompte-Mastenbrook, "Restoring Coast Salish Foods and Landscapes," 168.
the source of this knowledge is fundamentally Indigenous. Cavin is giving presentations at a few forestry conferences in the future about the burn and one hosting organization didn’t want Cavin to put Justine’s name on the presentation acknowledging him as a key contributor.86 Additionally, people have expressed more interest in talking to the non-Quinault scientist heading the project— who was hired after the burn and was not involved in the project’s initial planning process at all— than Cavin and Justine, two tribal members who were instrumental to pulling off the burn.

When asked what he thought about scientists being more interested in highlighting the more universal, rather than the Indigenous, aspects of the project, Cavin responded, “I don’t think its intentional, but unintentional just in that ‘we’ve never credited them before so why do we have to credit them now’ kind of situation. They don’t even think about it, that’s just kind of how it is.”87 The impulse on the part of non-Indigenous scientists to co-opt anthropogenic burning as an ecologically-sound land management practice and “downplay” the Indigenous roots of the practice— by literally refusing to acknowledge the Indigenous peoples doing the work to revitalize burning— exemplifies the importance of naming anthropogenic burning as an Indigenous practice occurring in the present.

While blatant disregard from fire ecologists is an obvious example of epistemic imperialism, so too is the condescending and romanticizing behavior of non-Indigenous, self-proclaimed allies. Cavin highlighted instances in which non-tribal scientists, who work in fields like ethnobotany or ethnoecology, and

86 Park, interview, February 1, 2018.
87 Ibid.
theoretically should have been receptive to the need to step back and listen, were condescending towards him and Justine:

A number of scientists that come out to the prairie, me and Justine will say something is one way and they’ll just kind of shake their head and say “no it’s this way” and no matter how many times we try and correct them, they’ll just brush us off and continue on with their way… There was this one woman we were going with to gather Indian tea and Justine and I said, “no you wait until its golden brown on the underside” and she was like “oh no, I’ve heard it’s the other way…” and she was plucking [leaves] off with white hairs underneath… We were like “no, it’s golden” and she was like “okay” and continued to pluck the white ones.\(^88\)

This anecdote demonstrates the ongoing tendency of non-Indigenous peoples to ignore the modern people that are descendants of a given culture who have necessarily “prescribed their own ideas and revised things to it.”\(^89\) Still, decolonization does not necessitate that Indigenous peoples revert to traditional lifeways in the ways expected by non-Indigenous allies. Again, essentializing ideas about the roles the Indigenous peoples “should” play in place reproduces colonial logics that undermine Indigenous peoples’ capacity for complex identity formation in the present. Cavin went on to say that the disregard manifests in “a certain look, wide eyes, ‘okay’ with a nod and [just] going back to what they were doing before.” The dismissive nature of these actions, he told me, feels “really fucking shitty.”\(^90\) Hence, partnerships operating under the guise of respect can still continue to prioritize settler epistemologies and interests.

Nevertheless, partnerships can be effective when positionality and consciousness of historic and contemporary power relations are taken into account.

\(^88\) Ibid.  
\(^89\) Ibid.  
\(^90\) Ibid.
On the Moses Prairie Restoration Project, the non-tribal scientists involved are not projecting their own interests onto the Quinault community, but are conscious of their role as allies seeking primarily to establish and open up options for community members. When I asked Caroline if she thinks the project has brought about more harvesting from community members, she made it clear that she was not expecting or demanding anything of the community and recognized how her stake in the project was not necessarily the same as that of Quinault community members:

Some plants are still being harvested, like Indian tea and berries, but some berries have been forgotten and some plants are used more than others. And I mean that’s up to the Quinault community what they value. I just encourage it because I love plants, but I think it’s healthy to be out there harvesting, the plants respond well to it, pruning and tilling… 

Moreover, she made it explicitly clear that she was not comfortable with taking credit for the project, because it was fundamentally never about her, as a non-Quinault scientist working for the QIN.

I didn’t want to lead this project at first because of that and it was a huge identity crisis and reminding myself of my place, [which was just to make the] opportunity: doing the paper work, being the paper pusher, and allowing the opportunity for something positive for the Quinault community… I don’t like to take credit for the project, I was just the super excited one trying to allow for the opportunity for it to happen and the community wanted it too.

Part of challenging knowledge systems and practices that have harmful histories involves recognizing the factors that allow them to happen. As Joyce Lecompte-Mastenbrook argues, the first step towards deeper restoration unfolding here is being able to recognize that the Coast Salish developed their own kinds of

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91 Martorano, interview, August 23, 2017.
92 Ibid.
“attachments and relations to the land that shaped their senses of themselves”

through Indigenous practices of burning and tending.

Carroll argues that cultural revitalization, “a project that tribes must
undertake, is part and parcel of the ongoing forces of settler colonialism.”

He suggests that cultural revitalization is a necessary step in producing “sovereign
landscapes,” which he defines as “spaces where environmental governance and
management take place on Indigenous terms and in Indigenous ways, however
complex and multifaceted they may be.” Critical to making sovereign landscapes is
“fashioning modes of environmental governance that are more in line with
Indigenous traditional values and perspectives toward the nonhuman world while
upholding the political structures that support and enable this process.”

To facilitate this, the QDNR staff has made it their mission to offer high
school and college students job and internship opportunities with the department to
encourage tribal member engagement in natural resource management and ecological
sciences. Caroline spoke about the need to involve more tribal members in similar
ways as Kim Sager, suggesting that tribal members are the ideal candidates for
managing Quinault land in the future: “I think having that tie between traditional
knowledge and modern science is super powerful, so I’m really rooting for more
tribal members getting into professional positions and getting college educations… I
think that’s key for bridging that gap.”

Though many of the decision-making

93 Lecompte-Mastenbrook, "Restoring Coast Salish Foods and Landscapes," 168.
94 Carroll, Roots of Our Renewal, 137.
95 Ibid., 33.
96 Ibid.
97 Martorano, interview, August 23, 2017.
positions in the QDNR are currently occupied by non-Indigenous scientists, Caroline is “optimistic that in the future there will be more Quinault members making decisions on managing their land. Sometimes there’s a separation between QDNR and the community, you know, biologists and science vs. traditions and the spirit side of things.”

Moreover, the resource management and environmental protection being done by the QIN demonstrates the tribe’s commitment to cultivating sovereign landscapes through practice as well as representation. The QIN has prioritized environmental protection to an extent that is far beyond the scope of most municipalities in the United States. Beyond Moses Prairie, the QDNR is conducting a wide array of ecological restoration and resiliency projects that are pushing the boundaries of what environmental management ought to look like. These projects include monitoring culturally and ecologically important animal populations, assessing streams and side channels on the reservation for climate change resiliency, and developing plans to relocate Taholah further inland in preparation for sea-level rise due to climate change.

So what does it ultimately mean to bring fire back to Moses Prairie? It is an effort to situate the Quinault people back in the environment, to challenge the cultural alienation encouraged by settler colonial apparatuses. But it is also fundamentally centered on the practice, the fire itself, which is distinctly of and for the Quinault people. For projects like this to resemble “restorative justice,” however, there needs to be a greater reckoning with the existing structures of settler colonialism that continue to limit tribal autonomy and self-determination.

98 Ibid.
CONCLUSION: Towards a Decolonizing Ecological Restoration Praxis

This concluding chapter seeks to consider salient intersections of analysis where the stories of dams and forgotten fires converge and diverge. I attend to the practice of ecological restoration using settler colonial studies and science and technology studies frameworks. I aim to highlight the settler colonial legacies at play in these examples of ecological restoration practice, in an effort to make sense of what an ecological restoration practice, in which Indigenous peoples are given agency over managing and restoring ancestral lands as they see fit, can look like. I consider tangible approaches to amending our practice, which can realistically be implemented in restoration work going forward.

In the stories of these places, there are interesting parallels and divergences. The first case study is a huge project with lots of funding and attention, unprecedented in its efforts to both remove two dams and restore a river, and on top of that, a co-management partnership between the Lower Elwha Klallam tribe and Olympic National Park. The second case study is a small project conducted by the Quinault Indian Nation on Quinault lands, aiming to restore a cultural system with the reintroduction of anthropogenic burning. In spite of their differences in scale and budget, these projects illustrate many of the same limitations and potentialities of what ecological restoration can do and mean in the context of a contemporary settler-colonial state.

Again, I reflect on how those operating within settler institutions can both be held accountable for past wrongs perpetuated by their institutions and be effective
allies to the rising tide of tribal activism seeking greater autonomy in Indigenous rights to self-determination. Given that the land we seek to heal is inextricably tied to ongoing settler colonial processes, how do we amend our practices to disrupt the continuation of this violence? Since restoration is predicated upon recognizing that our past practices were perhaps violent and wrong, we must apply a rigorous analysis of the methods and practices we use to bring about healing. It is important to identify conflicting narratives about place to see the historical gaps in our understanding. These are new sites for intervening in which we can begin to address submerged traumas that have yet to be reckoned with.

Meanings of Ecological Restoration

As I’ve argued throughout this thesis, ecological restoration practice cannot be presumed to be free from historical baggage. In this sense, I argue that understanding what the practice of restoring means requires attending to the subjectivities it cultivates. Drawing upon Saba Mahmood’s work on religious subjectivity-cultivation, I suggest that the impulse to “restore” is facilitated through ritualistic practice that derives meaning from existing social relations and dynamics. Mahmood argues that the self, or “a manner of being and acting that suffuse[s] all of one's acts, both religious and worldly in character,” is constructed via ritualistic practice.1 This practice is not just a space in which actors conform to a script of appropriate social action, but “is one among a number of sites where the self comes to acquire and give expression to its proper form.”2 Just as a religious subject is cultivated through

2 Ibid., 833.
practice, I suggest that the ecological restoration practitioner is cultivated through their labor in place. The meanings of the restoration practitioner’s work and the place itself emerge from their interactions in place, enmeshed within existing social dynamics. This labor literally makes place in the material sense, but also directs the meanings and relationships that can be constituted there. Removing dams, setting fire, planting new plants, and monitoring are all material interventions that leave the land different, impacting what these places “do,” or their abilities to affect/be affected. Restoration practitioners are not the only ones cultivating meaning through relationships in place, but their social power as the “designers” of the sites gives them greater responsibility in terms of authorizing and legitimizing what relationships “belong” in place.

In this respect, ecological restoration sites hold the potential to cultivate and reshape subjectivities through the emphasis placed on renewing or precluding relationships to place. Because of the intentionality that goes into planning these landscapes and how relationships should unfold in it, restored sites exist as “third spaces.” As defined by Nana Gangé, a third space is an “alternative space of social, ethical, economic, and ideological exchange […] where participants can suspend the dominant ideology… through enacting their idealized forms of ideology and practice, reversing what they see as dominant motivations and globally pervasive modes of production and consumption.”³ Though the past chapters demonstrated the inevitable porousness of third spaces and their susceptibility to dominant ideologies, there still remains something radical in the possibilities of intentionally changing relationships

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in specific places. While the work of restoring ecosystems necessarily exists within
long established and constantly unfolding social and political relations, in the choice
to restore there exists an opening for the consciously disrupting harmful dynamics for
the pursuit of more just futures.

Unsettling Nature

Both the Elwha River and the Moses Prairie Restoration Projects operate
within the fraught notion of nature as “people-less,” despite the ongoing presence of
the land’s Indigenous peoples. Generally speaking, notions of nature are not all
universally grounded in colonial processes. It is relevant to keep in mind that given
that “there is no consistent ‘colonial mind’, [there is also] no simple account to be
given of colonial ideologies of nature.”4 The underlying settler colonial assumption,
employed most obviously by the NPS, is that nature is pure and in “continual need of
purification- in need of protection from the ever-threatening elements that ‘have no
right place in the landscape.”5 It is highly political and necessary, then, to be
conscious of the notions of nature employed by restoration practitioners and how they
reify settler-colonial notions of place. As Kosek argues, “as long as racial histories
remain hidden, racist and racialist practices will continue to find some forms of
expression and efforts at environmental protection will continue to be cast as attempts
to guard and restore a natural, God-given purity, by the pure, for the pure.”6

The Elwha River finds itself trapped within the purist notions of the “park” by
settler society. Encapsulated within Olympic National Park, the river is a contested

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5 Kosek, Understories, 180.
6 Ibid.
site in many respects: in the questions of whose river it is, how we are to use it, and how we should care for it moving forward. Therefore, illuminating the calculated alienation of the LEKT from the river following settler expansion and the creation of Olympic National Park demonstrates the importance of uncovering submerged historical narratives. The reluctance on the part of ONP staff to orient their restoration practice around people helps to reinforce and reproduce the ideas that the Elwha watershed is fundamentally not for everyone, and especially not for the LEKT. If the restoration of the watershed is about facilitating renewed relationships to the land, shouldn’t this be a defining characteristic of all parts of the restoration, including revegetation?

Moses Prairie, on the other hand, exists within the liminal space of being distinctly human-altered, yet still in need of preservation against threats of logging and development. The Moses Prairie Restoration project involves the intentional placing of people back in the landscape. Facilitating new people-place interactions is entirely aligned with the project of producing sovereign landscapes and reasserting tribal autonomy. Indeed, situating prescribed burns as integral to the Moses Prairie restoration serves to establish an “Indigenous ultimate permanence” in the landscape, challenging and unsettling settler colonial conceptualizations of place. By restoring the cultural ecosystem of the prairie, the QIN is asserting that settler society cannot ever neutralize, eradicate, or control Indigenous being and becomings.

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Temporal Considerations: Haunting and Futurity

As my analysis of the Elwha River and Moses Prairie restoration projects demonstrates, ecological restoration is simultaneously informed by the past, future oriented, and still grounded in the present. Restoration practice is simultaneously responding to a wrongful past and gesturing towards a future goal of “restoration.” The true ideal of restoration, then, exists in a liminal temporal realm in which narratives and potentialities converge. While on the one hand people involved with the restoration understand their work as part of a never ending process, the meaning of their work in the present is deferred to a far away idea of what the restored ecosystem should look like— a notion of complete healing.

Useful for understanding the role the past plays in these projects is Avery Gordon’s framework for the material realities of “ghostly matters,” or “matters that have been and continue to be excluded from rational conscious memory and from the historical record.”8 These matters haunt by making the absent past present, “in structuring the here and now.”9 According to Gordon, investigating a haunting “is a matter of following the figure of the ghost, between the present and absent, the excluded and included and the visible and invisible, to that dense site where history and subjectivity make social life.”10

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9 Ibid.
10 Ibid.
With the immense ecological and social trauma described in the two case studies, “haunting” is useful for thinking through how the conflicting historical narratives of place coalesce in the material present. Indeed, as these historical narratives are negotiated in place, the ghostly matters of the past are made present once again. This was evident in the re-emergence of the LEKT’s sacred site following dam removal, the return of the riverbank lupine to the Elwha watershed, and the resurgence of culturally significant plants following the burning away of crowding shrubs on Moses Prairie. The landscape’s response to restoration reflects and embodies the past. Gordon argues that when confronted with these unresolved specters, most important to taking ghostly matters seriously is

… The willingness to follow ghosts, neither to memorialize nor to slay, but to follow where they lead, in the present, head turned backwards and forwards at the same time. To be haunted in the name of a will to heal is to help you imagine what was lost that never existed, really.11

Following ghostly threads backwards in time requires abandoning the colonial notions of a pristine nature. It also requires giving up the long held ideal in restoration ecology that ecosystems have stable-states that they naturally revert to. The reality of stolen land and its histories of use, of how people related to it—the stories long ignored and concealed through technologies of dams and fire suppression—emerge again. These ghostly matters cannot be reconciled away with the same myths that justified their erasure and brought about the need for restoration. Perhaps this is the most significant component to the project of restoring: bringing these ghostly matters to light and reckoning with their damage and harm. What good is removing a dam or

setting a prairie on fire if it is not explicitly responding to past injustice? What can be healed if we don’t respond to deep relational assemblages that have long been silenced, excluded, and, consequently, forgotten?

The act of restoring becomes infused with different meanings depending on how we tell these stories. Gordon gives the example of the activism of the Mothers of the Plaza de Mayo, the Argentine mothers whose children were "disappeared" during the state terrorism of the military dictatorship in the late 1970s and early 1980s. The women were uninterested in the false reconciliation offered in the form of the government sending them remains of their children; rather, they insisted “on a reckoning with disappearance as what has happened to their children, not the reduction of disappearance to death.” Their children’s disappearances remained a phenomenon of the present. The sending of bones, however, was an effort to deny the present and the deeply haunting nature of what the state had done. It was an effort to do away with the inevitable grief and the mourning.

In this vein, the environmental trauma— and its linkages to settler colonial violence—experienced on the Elwha River and Moses Prairie remains a phenomenon of the present, regardless of experimental results that indicate some beginnings of ecological recovery or reports about how these projects demonstrate an “undoing of” settler colonial violence. Wrapping things up neatly with clean, reconciliatory language to resign the wrongdoing to the past is telling another myth that prevents us from seeing settler colonialism as an ever-present reality.

12 The Nature Conservancy in Washington, "Bringing Fire Back onto the Quinault Indian Nation".
While a place’s pasts inevitably manifest in the present, these interactions are simultaneously relevant to what a place can be in the future, or, its “futurity.” As defined by Tuck et al., “futurity is more than the future, it is how human narratives and perceptions of the past, future, and present inform current practices and framings in a way that (over) determines what registers as the (possible) future.”\(^{13}\) The framework of futurity is also valuable for challenging hegemonic settler colonial place narratives. As Tuck et al. argue, “Indigenous futurity forecloses settler colonialism and settler epistemologies… [But does not necessarily] require the erasure of now-settlers in the ways that settler futurity requires of Indigenous peoples.”\(^{14}\) Making room for Indigenous futurity means unsettling settler futurity in a way that establishes “ultimate permanence” of Indigenous peoples in place.

The relationships between past, present, and futurity highlight the complexity and uncertainty ever-present in finding ways to live well with one another on land stolen and degraded by settler dominance. The violence has been vast and ongoing, with true justice and resolution located in the future repatriation of land to Indigenous peoples. Yet in the face of resurfacing pasts and future possibilities, how do we locate ourselves in present praxis? Where can we find sites of intervention where these oppressive structures can be challenged, if not yet truly dismantled?

In this line of thought, I find Donna Haraway’s treatment of partiality to be useful: she suggests that instead of focusing on trying to “heal away” all of the past’s errors and violence, we must choose to be “deeply committed to the more modest

\(^{13}\) Tuck et al., "Land Education," 16.
\(^{14}\) Ibid., 20.
possibilities of partial recuperation and getting on together.”\textsuperscript{15} The necessity of recuperation being “partial” speaks to the extent of the loss that has and continues to devastate life and prevent flourishing. Though the Elwha may become a healthier river ecosystem, it is unlikely that salmon populations will rebound to the numbers prior to the construction of the dams because of the lack of funding for continued habitat restoration. Similarly, though Moses Prairie may come to resemble the managed prairie systems of the time prior to European colonization, the loss of the intergenerational transmission of knowledge due to cultural genocide and assimilationist policies continues to permeate current efforts to revitalize language and tribal identity.

Eco and multispecies philosopher Thom van Dooren actually argues that it is this acceptance of an irreparable loss that allows us to craft and cultivate the “response ability” necessary for different futures:

Mourning is about dwelling with a loss and so coming to appreciate what it means, how the world has changed, and how we must ourselves change and renew our relationships if we are to move forward from here. In this context, genuine mourning should open us into an awareness of our dependence on and relationships with those countless others being driven over the edge of extinction. The reality, however, is that there is no avoiding the necessity of the difficult cultural work of reflection and mourning. This work is not opposed to practical action, rather it is the foundation of any sustainable and informed response.\textsuperscript{16}

Even though it has been three years since the dams on the Elwha River were fully removed, the floodplain has not yet stabilized and the river routinely cuts into

the gravel terraces where the sediment was deposited during the drawdown of the reservoirs. The river has room to “remember” where it used to be and is still an active agent in the landscape. Those working on the restoration project do not know where and how it will flow in the post-dam landscape. They are bearing witness to a new iteration of the Elwha River: a river that remembers where it used to be but is now forging new paths. Similarly, the QDNR staff cannot predict what a regularly burned prairie will look like, but must wait for the plants to respond to the disturbance they had evolved with. It is the landscape’s turn to respond: post-disturbance flourishing is a multispecies project, dependent on entangled assemblages.

In this sense, ecological restoration is “fraught with risks and joys:” the joys of more livable relationships and the risks of letting lingering histories veer back into familiar, harmful assemblages. Through the process of restoring ecologies, we are forging new narratives, new practices, and doing the hard work of holding ourselves accountable while trying to make another world possible. Reckoning with the histories and matter that have been willfully kept in the dark offers (a partial) healing potential in reconfiguring place-based relationships. As the stories of the Elwha River and Moses Prairie remind us, what a place once was and the potentialities of what it may someday be are inextricably tied together. Recognizing the unique fission of temporalities involved in ecological restoration allows us to cultivate a practice in which past narratives and configurations of belonging manifest and are reckoned with and reconfigured in the present, thereby generating space for decolonial futures.

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Autonomous Knowledges

Within both of the case studies there are obvious points of tension between balancing knowledge production and involving the larger community in the restoration process—a tension between research agendas and relationship building. Western science has a long history of supporting axes of oppression through its use in colonial and settler colonial projects. Colonial scientific knowledge was harnessed to specialize and maximize settler benefits from nature (whether through agriculture or, latterly, through conservation). Through this knowledge production, colonized nature was rendered productive, resulting in “new species, new systems of production, new forms of social relations.”\(^\text{18}\) The development of land management technologies, such as dams and fire suppression, served to not only shape the environment, but to mold it to fit the needs of settler society. The dams on the Elwha River were implemented for WESK-backed ideals of harnessing hydropower to power both settler expansion and the displacement of the Klallam peoples. Likewise, fire suppression on Indigenous prairie systems and across the Western U.S. was as much about trying to limit high intensity forest fires as it was about limiting Indigenous land management practices to further the project of assimilation.

Although Indigenous knowledge is sought for some degree of environmental resource management decision-making, “the regimes to which this knowledge will be applied are based on Western scientific theories and management practices. This means that only knowledge that is consistent with Western science tends to be

\(^{18}\) Adams and Mulligan, *Decolonizing Nature*, 47.
acknowledged.”19 The glorification of Indigenous knowledges in the more palatable form of TEK can be framed as appropriation masquerading as respect. As McGregor argues in her writing on environmental practice and Indigenous knowledges, “‘doing’ TEK in the dominant, Eurocentric mindset basically boils down to extracting knowledge [from Indigenous peoples.]”20 When projects dominated by WESK ask or take knowledge about the environment without consulting Indigenous peoples at all, it is another brand of colonial extraction: “‘You have taken our lands; now you are after our minds.’”21 In this sense, environmental work in the United States unfolds within the major power imbalance of those who have “traditional ecological knowledge” (TEK) – Indigenous peoples – and those who want it – non-Indigenous restoration practitioners –. This is exemplified by the fire ecology community attempting to overshadow the Indigenous meanings of Moses Prairie Restoration Project by ignoring one of elders responsible for making the burn a reality.

A core limitation of utilizing TEK in environmental and resource management is a “lack of understanding of Indigenous peoples, their philosophies, values, traditions, and knowledge.”22 The assumption underlying the practice of most non-Indigenous restoration practitioners is that “Indigenous” knowledge is a collection of related observations over a long scale of time in a particular place. While this is certainly an aspect of it, scholar Kyle Powys Whyte argues that Indigenous knowledge “is the knowledge of how one is situated as an agent in relation to other

20 Ibid., 397.
21 Ibid., 401.
22 Ibid., 397.
beings, entities, and systems that exercise difference and similar forms of agency.\textsuperscript{23} Whyte argues that Indigenous knowledge is necessarily linked to communities who have modified knowledge because it supports sustenance and self-determination across profound changes in physical occupied space and social structure. In this respect, Indigenous knowledge refers to active participation and engagement in ever emerging relational systems.\textsuperscript{24}

Building knowledge about ecological restoration doesn’t necessarily need to be harmful or exclusionary to Indigenous peoples. As philosophers of science have sought to argue, knowledge production is based upon the differential experiences and positionings of knowing subjects, thus rendering them inevitably partial. Our positionality in the material world and within webs of interacting and intersecting discourses determine how we live in the world and produce the content of our consciousness. This results in “situated knowledges”—or what one is capable of observing based on one’s social location varies across differentially located positionalities.\textsuperscript{25} Knowledge creation, Haraway argues, is not just an observation of everything from nowhere (or “a god trick”), but a conversation between the situated subject and the agent-object at every level of articulation. The positionality of the split, contradictory, and embodied self implies responsibility for our enabling practices. Moreover, it offers the potential for better accounts of the world by opening webs of differential positioning up for exploration.

The transformative potential of this approach to knowledge production

\textsuperscript{23} Whyte, "Indigeneity," 146.
\textsuperscript{24} Ibid.
requires more than the acknowledgment of partiality for its own sake but also an orientation towards seeing and learning from a multitude of partial perspectives: Haraway suggests that scientists are “bound to seek perspective from [repressed and overlooked] points of view, which can never be known in advance, that promise something quite extraordinary, that is, knowledge potent for constructing worlds less organized by axes of domination.” Complex scientific texts and discourses are always grounded in and constituted through intersections with other social, political, religious, or cultural texts and discourses. Our epistemic tools (models, metaphors, experiments, concepts) are always located within a web of intersecting meaning-making discourses, thus rendering them elusive of ever being fixed under the domination of a given scientific discipline. The recognition of pluriversality (of both meaning and experience) serves to produce knowledge practices that are more adept at challenging axes of domination and assisting in liberatory struggles. We are dependent upon and responsible to the world we are part of, and not merely a perspectival viewer of it. Part of this responsibility extends to objects of inquiry, seeing them as in a mirroring relation with our discursive articulations.

Additionally, knowledge production about environments and environmental practice must be driven by the interest and consent of the communities involved. Opening collaborative dialogue and practice between Indigenous peoples and non-Indigenous organizations requires the baseline acknowledgement that power underpins the place of science in contemporary global society and a commitment to challenge hegemonic assumptions about Indigeneity and Indigenous knowledge.

26 Ibid.
Otherwise, “good-intentioned” allies will continue to reduce Indigenous peoples to “anachronistic sources of insights, information and knowledge that can be used by science to produce authoritative, authentic and useful universal knowledge in the present, for the future.”

Rather than have non-Indigenous researchers attempt to chronicle and collect Indigenous understandings of the environment, their time is better spent acting as allies to Indigenous peoples, using their settler-privilege to support “self-determination by protecting their rights so they do not disappear.”

Supporting further research—done by and for Indigenous communities—into Indigenous land management practices can further the legitimacy of these practices and open up more opportunities for funding. Moreover, validating historically marginalized practices is valuable in cultivating cultural pride and foregrounding the role Indigenous peoples play in contemporary natural resource management.

Uplifting and highlighting Indigenous knowledges requires taking them on their own terms, not applying assimilationist expectations or engaging in extractionist, settler tendencies.

The Arts of Living on a Damaged Planet

Shifting narratives and relationships entails listening, learning, and being open to critical self-reflection, especially for non-Indigenous restoration practitioners. In attending to history, we can see how restoration practice comes to reproduce colonial relationships between actors in the landscape through the prioritization of WESK and

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28 A process reminiscent of “salvage ethnography” and the extraction of knowledge from/about Indigenous peoples that was justified by “myths of a vanishing race.”
29 McGregor, "Coming Full Circle," 399.
the discursive placement of Indigenous peoples in the past. These restoration projects transcend the disciplinary limitations of restoration ecology, or WESK more broadly, because of the ways in which they are tied to the larger contemporary struggle for reparations and the autonomy of Indigenous peoples of the United States. Therefore, ecological restoration projects are important sites for cultivating practices that challenge and resist dominant ideologies of white supremacy, settler colonialism, and neoliberal capitalism.

A decolonizing ecological restoration praxis necessitates reforming ideas of “parks” and other “public commons” employed in environmental discourses. The way we talk about these spaces must begin to account for the Indigenous peoples who were originally displaced and, in spite of treaty rights and updated harvesting policies, continue to be excluded in the present. Beyond empty promises for “access and inclusion,” institutions like the NPS must actively implement changes to facilitate the cultural change desperately needed. On a basic level, this involves institutional relearning and re-evaluation of park policies to consider how they reproduce settler colonial logics of exclusion. It is important for those doing restoration work to understand that non-Western knowledge systems are devalued because of historically violent power dynamics. Learning about the socio-cultural construction of land management epistemologies and technologies can be useful for restoration practitioners who have only been trained within WESK are uncritical of the assumptions it makes.

There is a necessary distinction between what it means to re-story lands and reconfigure relationships in place for settlers and for Indigenous peoples. Recently,
“alternative settler cultures” have emerged to challenge human alienation from ecologies and cultivate healthier ways of relating to place. These new “land ethics” generally fail to recognize Indigenous peoples’ past, present, and future roles in place. Prominent settler colonial scholars ask in turn what it means to try and create new ways of relating to the environment (often appropriating traditional Indigenous belief systems), when Indigenous peoples are inhibited from relating to their environments:

Decolonization does not follow if settlers simply study and emulate the lives of Indigenous people on Indigenous land ... [this] is relevant in particular to those for whom anarchism links them to communalism and counterculturalism, such as in rural communes, permaculture, squatting, hoboing, foraging, and neo-pagan, earth-based, and New Age spirituality. These ‘alternative’ settler cultures formed by occupying and traversing stolen Indigenous land and often by practicing cultural and spiritual appropriation ... They must ask, then, if their interest to support Indigenous people arose not from an investment in decolonization, but in recolonization.30

In order for federally recognized tribes to assert rights to sovereignty, they need to have full control over resource management, or the “practices that fix or consolidate forms of access, claiming, and exclusion” in the environment.31 Indigenous sovereignty in the context of the United States is more than a territorial claim and assertion of autonomy, but rather, is “a dynamic process in need of constant regeneration and recovery.”32 Carroll argues that, “Indigenous sovereignty unsettles the singularity of sovereignty as it was developed in Europe and its colonies... [It] is constituted by relations of interdependency that take material form in people’s bodies,

32 Carroll, Roots of Our Renewal, 18.
houses, and lands.”

It is not enough to simply say that tribes are sovereign, it is simultaneously a matter of settler society recognizing them as such and supporting in ways that challenge the guiding settler colonial logic of elimination.

Supporting Indigenous sovereignty means moving beyond the settler frameworks of governance that non-native allies expect Indigenous peoples to fit within. In Mark Rifkin’s “Beyond Settler Time,” he argues for thinking more critically at the temporal and affective frames that we operate within when considering the politics of peoplehood, including attempts to translate Indigenous becomings and being into settler frameworks. He suggests that we need to move towards “a more capacious sense of the character and contours of peoplehood than what currently is institutionalized and recognized by the state.”

Rifkin suggests this can perhaps resemble being-in-place as “having collective stories that provide orientation with respect to that place’s relation to other places, its ongoing participation in a shared history and futurity, and the ethics that guide how one connects to the land and to other people.” This landed storying “can involve shifting locations, histories of migration (chosen and coerced), and remembered relations to prior places of inhabitance that do not invalidate one’s relation to where one is now.”

Thus, characterizing other possibilities for experiencing and expressing

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33 Ibid.
35 Ibid., 45.
36 Ibid., 205.
peoplehood as sovereignty insists on validating various kinds of social forms, processes, and trajectories.” 37

What does supporting Indigenous sovereignty look like in ecological restoration practice for non-Indigenous allies? The question of allyship asks us to think critically about what meaningful partnership means and what privileges must be challenged. As Stephanie Irlbacher-Fox argues, the only way for settlers to achieve “co-existence” with Native nations is through “co-resistance” to colonization.38 She suggests that non-Indigenous individuals have a responsibility to “help remove the barriers and obstacles to Native sovereignty” in their institutions.39 Dismantling settler privilege is the key part of the “unsettling” that needs to occur in the pursuit of collective alliance:

Transitioning from a position of dominance to one of dependence constitutes an important moment of “unsettling”: reaching a place of potentially transformative discomfort. An often completely new and deeper understanding of Indigenous peoples’ cultural practices then begins to fill what was once a space of ignorance and privilege, replacing erroneous beliefs with appreciation and understanding. Unsettling thus becomes a basis for transforming settler’s self-understanding, and also the understanding of Indigenous peoples and the injustice and privilege shaping Indigenous-settler power dynamics.40

Settler institutions must challenge the narratives they tell and evaluate the damage that their unconscious practices can do. It is essential to dismantle any savior-complexes in order to actually honor and recognize the value these communities hold and the important work they are capable of doing without the validation or

37 Ibid., 184.
justification of Settler institutions. Non-Indigenous restoration practitioners must vocally support tribes’ efforts to revitalize land practices in support of tribal autonomy, with the recognition that this advocacy is ecological restoration.

With this in mind, efforts on the part of the National Park Service and organizations like the Nature Conservancy to be decolonial allies to Indigenous peoples remain hopeful and heartening, especially when considering the material results of these projects. Still, these efforts do not excuse instances when these organizations perpetuate harm. There is no option but for settler society to hold itself accountable and do better. Any collaborative work with federally recognized tribes must begin with a willingness to listen, a commitment to checking paternalistic attitudes, and without an end goal in mind.

So, how can we get ecological restoration to the point of “unsettling” for collective alliance? Beyond shifting narratives and reforming settler institutions, I believe the point of unsettling comes with reparations. I argue that these case studies demonstrate sites in which ecological restoration can move towards a path of reparations: including the repatriation of ancestral lands for tribal management, funding for autonomous naturecultural projects without strings attached, and supporting policy on all scales of government that supports and maintains tribal rights. Ecological restoration is ultimately about the relationships we facilitate rather than the goals we strive for. Ultimately, our praxis must foster space to invest more deeply in collaborative and collective flourishing in place.

The purpose of thinking through these case studies is not to suggest that ecological restoration in the United States will forever be tied to historically violent
conservation practices or anti-Indigenous environmentalism. Nor is it to say that place-based pedagogies or efforts to remediate our environments are fruitless endeavors. Rather, this thesis is an effort to consider how we can be more attentive to the inevitable complexities of fostering growth after devastation. Attending to the messy narratives and relationships we inherit from places is not easy. Still, it is our responsibility to one another to “rewave” or re-engage them if we are committed to maximizing collective flourishing. As Donna Haraway writes, “both inheriting and also reweaving ongoing webs of affective and material relationships are the stakes.”

This work is inevitably chaotic: “There is no innocent or simple way to stay with all the faces of the trouble… [but this is] precisely why we must do so.” For non-Indigenous peoples living in the United States, we are not innocent and never can be. Staying with the trouble of ecological devastation also means staying with the trouble of injustices of settler-colonialism. Doing this frees us to begin gracelessly stumbling forward, searching for new modes of interacting with the people and places we encounter.

Anthropologist Anna Tsing describes the search for these new practices as “arts of living on a damaged planet,” which include cultivating the capacity to reimagine wealth, learn practical healing rather than wholeness, and stitch together improbable collaborations. Tsing’s approach coupled with Haraway’s idea of “staying with the trouble,” suggest, again, that the work is messy, imperfect, and complicated, but most importantly, necessary.

41 Haraway, Staying with the Trouble, 216.
42 Ibid., 196.
43 Ibid., 136.
As the stories of the Elwha River and Moses Prairie demonstrate, ecological restoration is often far from perfection, particularly when little is done to disrupt settler futurity and secure Indigenous futurity. As seen on the Elwha River Restoration project, instances in which “healing” through ecological restoration projects is done superficially must be analyzed. Yet, imperfect projects can still set powerful precedents, especially when resources— in the case of the Elwha: project lands and funding – are being distributed in ways that resemble reparations. When ecological restoration is done by and for Indigenous communities, as seen in the Moses Prairie Restoration Project, there is the potential for revitalizing people-place relationships for the sake of autonomous Indigenous futures.

These case studies show that ecological restoration carries vast potential to bolster tribal sovereignty and renew Indigenous relationships to place still threatened by settler colonial processes. In this thesis, I’ve sought to exemplify how a decolonizing ecological restoration praxis, when used to read and understand places, can expand potentials for healing. By no means am I suggesting that this is currently enough to compensate for the loss, the violence, or the ongoing reality of the settler colonial state. Nor could it ever be. But it is a concrete starting point, where we can begin unsettling the place-relationships sanctioned by settler society and, consequently, begin to unsettle settler futurity for the sake of Indigenous resurgence.
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