

The Elwha River Ecosystem Restoration Project:
A Case Study of Government-to-Government Co-Management

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Abstract

Evaluating Co-Management at the Elwha River Ecosystem Restoration Project

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The contribution of indigenous groups in natural resource management is generally believed to enhance management practices and produce positive outcomes for its participants, by improving stewardship and encouraging power-sharing arrangements, among other outcomes. For federally recognized Native American communities, government-to-government co-management relationships with the U.S. federal government have provided opportunities to modernize the treaty trust relationship, and enrich linkages between environmental ethics and cultural heritage, building tribal capacity and autonomy. The case of the Elwha River dam removal and ecosystem restoration on the Olympic Peninsula in Washington State presents an opportunity to demonstrate the progress made in consultation practices and co-management efforts on the behalf of the U.S. government, in the execution of the largest dam removal project ever attempted. For the Lower Elwha Klallam Tribe, river restoration will re-connect the Tribe to the legendary salmon runs that are its cultural livelihood. The co-management relationship established between the project's two lead actors, the National Park Service and the Lower Elwha Klallam Tribe, has demonstrated the positive outcomes of a mutually respected process facilitated through power-sharing, as well as the dilemma for tribal decision-makers in maintaining cultural tradition and engaging in environmental management under congressional mandates.

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INTRODUCTION

The Elwha River Ecosystem Restoration Project

The Elwha Act was passed in 1992, providing a settlement between the opponents on either side of the proposal to remove two dams on the Elwha River and restore its ecosystem to its past pristine state (Crane, 2011). The federal law called for the complete restoration of the Elwha River ecosystem. The Elwha Report was published in 1994 recommending the removal of both dams as the only course of action to achieve The Elwha Act's mission (USDOJ, 1994). It would be another 20 years of both collaboration and political infighting before funding was obtained to pursue the project. Over that time, a co-management relationship was formed between the ERRP lead action agency, the National Park Service, and the Elwha Tribe. This relationship would be instrumental throughout project planning and implementation. Many rounds of technical analyses were conducted before an action plan was approved and the \$325 million restoration project began. Deconstruction of both dams began in 2011 and restoration efforts are proceeding for the largest project of its kind ever attempted. Today, salmon have once again found their way to the upper tributaries of the Elwha River, and the creation site of the Elwha Tribe has again been found.

The complete story of the Elwha River Ecosystem Restoration Project (ERRP) began over 10,000 years ago (Wray, 1997), when humans first inhabited what is now called the Olympic Peninsula, in Washington State, the far northwest corner of the contiguous United States. There, the Klallam people lived on the abundance of the temperate rainforest and teeming straits and rivers (Busch, 2008). The ancestral birthplace of the Lower Elwha Klallam Tribe is located among the rocks in the Elwha River (Busch, 2008) and traded with, and sometimes

battled, nearby tribes across the peninsula and the Salish Sea (Wray, 2002). The Elwha River was full to the brim with salmon and steelhead during the seasonal migration runs and pristine waters flowed down from the glaciers, high in the Olympic Mountains. When European settlers arrived in the latter part of the 1800's things began to change. People saw the potential for great feats of civilization in this new frontier (Aldwell, 1950). Violent wars took place between settlers and Natives, and eventually a treaty was signed between the U.S. government and area tribes, who ceded most of the area to the United States. The Lower Elwha Klallam Tribe (Elwha Tribe) fought for its ancestral lands and waters, and eventually settled on a reservation at the mouth of the river (Crane, 2011).

In the early 1900's, a Canadian proposed to use the Elwha River as a source of electricity and built two dams (Aldwell, 1950). Neither dam accommodated for fish to pass the concrete barriers. In a relative blink of an eye, the Elwha River ecosystem, its teeming salmon runs, and the source of livelihood, ancestral connection, and cultural foundation for the Elwha Tribe, ground to a halt. No longer would salmon bring nutrients upstream from the ocean where they nourished the trees and soil high in the tributaries. The Elwha Tribe's birthplace was buried under the reservoir created behind the Elwha Dam (Busch, 2008).

In 1938, the Olympic National Park (ONP) was created, annexing the majority of the river within its protected boundaries. From that day, the upper stretches of the river were kept pristine, but the dam projects dramatically altered the landscape on the lower reaches (USDO, 1994). Thus began a long battle between the Elwha Tribe, federal and state agencies, community groups, environmentalists, and local governments, to reverse the dams' damage and restore the river's ecosystem, and for the Lower Elwha Klallam Tribe to exercise their rights to sustain their culture and way of life for generations to come.

Environmental Co-Management with Indigenous Peoples

Collaborative environmental management evolves out of a desire to transit from top-down command-and-control style government regulation to an acceptance of increased community participation in governance (Koontz et al., 2004). These processes are believed to produce more equitable and robust management outcomes, with sustainable solutions fortified by community buy-in (Layzer, 2008). Co-management is a collaborative arrangement that features characteristics including joint decision-making authority where each entity retains veto power over proposed decisions, considerable autonomy granted for certain parties to conduct specific activities with joint agreement, the transfer of funds, a high level of dependency and information and knowledge transfer, as well as joint implementation of work on-the-ground (Donoghue et al., 2012; Plummer and Fitzgibbon, 2004; Tipa and Welch, 2006). In settler states with a colonial history, the modern management relationship between indigenous communities and national governments has evolved in line with the ideals of collaborative management, but brings a more complex context of past oppression, and varying legal and property rights that makes engagement in management processes problematic for indigenous groups (Tipa and Welch, 2006). In the United States, Native American tribes are each unique in their administrative organization, and capacity. The legal status of tribes as well as their rights to resources varies as well, depending on their recognition as a federally declared treaty tribe, with legal definition as stated in the original treaties with the U.S. government, as well as the progressive court decisions that have define specific tribes' legal and resource use rights since the treaty era. Under federal law, stemming from the original treaties and subsequent court orders, and implemented in pervasive federal and state policies, tribes must be consulted on actions impacting tribal

reservations or the tribe itself, including its ability to fulfill its treaty rights (Goodman, 2000). In Washington State, those rights include fishing, hunting, and gathering at usual and accustomed sites (Goodman, 2000). And since Judge Boldt's ruling in 1974, Western Washington tribes were made co-managers of salmon and steelhead fisheries with the state, setting a new precedent for the cooperative management of natural resources (Goodman, 2000). Environmental co-management between national governments and sovereign tribal communities has provided opportunities to respect treaty rights, for tribal self-governance to be expressed in ways unseen since prior to the treaty era, and brought beneficial outcomes for the sustainable management of natural resources for all resource users (Tupa and Welch, 2000). In the Pacific Northwest, it has demonstrated the great potential and challenges for collaboration between resource users in order to find sustainable solutions to vexing environmental problems, and progress in the pursuit of environmental justice (EJ):

“EJ discourse challenged environmental thinkers to reconsider the meaning of basic concepts like nature [and] environment... they forced many to consider the role of race, ethnicity, national origin, class, gender, and culture in the framing of environmental history, environmental ethics, and ecological politics... and re-centered [it] in the constellation of cultural differences that construct variant epistemologies of nature (i.e. as natural resource, commodity, wilderness, ecosystem, and homeland).” (Pena, 2005, p. 131)

However, co-management processes engaged in by state and federal agencies have not always demonstrated this shared right over resources, or met the expectations for meaningful consultation on federal actions. The case study in this thesis presents an opportunity to evaluate the progress made in our understanding of social-ecological systems and environmental co-management. It is a chance to observe how tribal consultation and co-management between two sovereign governments, the U.S. and The Lower Elwha Klallam Tribe, has progressed since an

ugly past of racial segregation and cultural oppression, to achieve an monumental goal: remove the dams on the Elwha River and restore the ecosystem on which the tribe and local community rely, and many others admire from afar.

RESEARCH OBJECTIVES

This study will evaluate the processes and impacts of collaborative and co-management at the ERRP focusing on the relationship between lead project partners, the National Park Service (NPS) and the Elwha Tribe. The lead actors have engaged in government-to-government co-management throughout the project's duration to date, consulting on all aspects of its implementation to mitigate negative environmental and social impacts while facilitating beneficial outcomes and achieve project goals.

This case study examines the historical context of the Elwha River and the people who relied on it historically, and altered it, the case study will explore the timeline of the ERRP including the events leading up to the dam removal decision, the formation of collaborative relationships among project partners and stakeholders through formal institutional co-management frameworks and informal cooperation. It explores the co-management processes integrated throughout project planning and implementation, designed to facilitate the successful achievement of ERRP project goals, and positive social outcomes resulting from a restored Elwha River ecosystem. The participant's perceptions of their roles and the roles of other groups, and level of satisfaction with the co-management processes and outcomes, are elicited in able to assess project achievements to date.

Results are examined through the lens of existing legal foundations and institutional frameworks that facilitate tribal consultation and the government-to-government relationship in

the United States and Washington State. They also compare the theoretical frameworks and best practices exhibited in the bodies of literature surrounding the topics of environmental co-management with indigenous peoples, collaborative governance, environmental justice, and indigenous sovereignty.

These data are used to generate conclusions regarding the effectiveness of the tribal co-management and collaborative management efforts implemented throughout the ERRP. They are used to assess the achievement of potential outcomes, including improved and efficient project management, equity and environmental justice, the expression of the co-managers' sovereignty as governing nations, and beneficial cultural impacts. This project will contribute to the body of case studies exhibiting these topics, and will add to the institutional knowledge, especially in Washington State, of government-to-government collaboration with Native American tribes.

Scope of Research

This case study focuses on the period following The Elwha River Ecosystem Restoration Act in 1992. That date marked the beginning of project planning, the compilation of the initial Elwha Report, and subsequent environmental impacts statements that outlined the impetus and potential outcomes of dam removal and eventual ecosystem restoration. The formulation of project planning documents and their implementation have required close consultation between managing agencies, including consideration of ecological impacts, and well as environmental justice concerns, encompassing treaty rights, cultural heritage and preservation, and social service obligations to the local community impacted by the ERRP. The existence of the ERRP and the success of dam removal is the result of both the environmental and historical conditions of the Elwha River itself, as well as the efforts of many participants, including federal and state

agencies and governments, state and U.S. elected officials, and local governments, the Elwha Tribe, environmental groups, and resource user groups, at times acting both in their own interests and at others seeking strategic and/or mandated collaboration. It is difficult to isolate the role or relationship of one group without including the impact of the others.

This case study focuses on the co-management relationship between the NPS and the Elwha Tribe, as the two actors who bore the primary responsibility for the co-management relationship of the ERRP. Although the relationship was forming throughout the events leading up to dam removal, this study will examine their roles as lead actors in project planning and implementation after the passage of the Elwha Act. In reality, there were many more project partners at the federal, state, and local level, who all interacted with the Tribe and participated in decision-making. To conduct a comprehensive analysis of the collaborative efforts at the ERRP, those entities would also need to be included, with interviews, mission evaluations, examination of legal foundations, and historical context throughout the lifetime of the project.

The intricacy of various labels and definitions for collaborative management, and additional complexity of the sovereign government-to-government co-management relationship, creates confusion when discussing this topic. These definitions will be explained further below, however, this report will use the term “collaboration” or “collaborative management” to refer to the dynamics of the managing agencies and stakeholder groups involved in the dam removal effort and the ERRP; the specific relationship between the Elwha Tribe and the lead federal entity, the NPS, toward the implementation of the ERRP will be referred to as “co-management,” a label consistent with the discussion on the topic found in the academic literature. This does not refer to the unique fisheries co-manager status, or fisheries co-management process, attributed to western Washington tribes as a result of the Boldt Decision, also discussed below.

Because the project is currently in progress, long-term impacts are difficult or impossible to assess, therefore, impacts are evaluated in the projects' current stage. Similarly, this evaluation is limited to the ERRP's social impacts, as environmental impacts require a longer timeframe post project completion to measure effectively. The social impacts are determined upon the outputs and outcomes identified in the project goals and objectives, stakeholder perceptions to date, and comparison with expected outcomes and impacts identified in the academic literature on the engagement of indigenous communities in the management of natural resources, and community engagement in collaborative environmental management. In addition to empirical data collection, the case study measures project plan implementation indicators as evidence of effective co-management. The study will seek to answer the following questions:

What is the process for and outcome of co-management at the Elwha River Ecosystem Restoration Project?

1. How is the co-management process facilitated throughout management plan development and project implementation?
 - a. What co-management frameworks, agreements, and/or processes were included in the ERRP plan development and implementation?
 - b. What are the goals and objectives of the ERRP co-management arrangement?
 - c. What are the participants' perceptions of the co-management process at the ERRP?
2. What are the social outcomes resulting from co-management?
 - a. What co-management processes in the ERRP result in positive/negative impacts on the Elwha Tribe and the NPS?
 - b. Have co-management processes impacted ERRP project management?
 - c. In what ways has co-management of the ERRP been successful/unsuccessful (to this point)?
 - d. What is the value of successful co-management at the ERRP? –in Washington State? –in the U.S.?
 - e. How has co-management of the ERRP contributed to progress toward environmental justice?

RESEARCH METHODS

To reflect the complexity and depth of the resulting impacts from the Elwha Restoration Project, this study applies a flexible design strategy to include multiple qualitative research methods in order to capture the breadth of relevant data.

It is founded in case study methodology (Yin, 2003), and includes other elements of qualitative research methods, which employ a grounded theory, or hypothesis-generating approach, allowing the researcher to develop hypotheses about their subject via questioning of participants (Auerbach and Silverstein, 2003). Comparative theory analysis from the academic literature including previous case studies with similar contexts, as well as ethnographic research and simple observation (Robson, 2002) will be utilized and analyzed as unobtrusive indicators (Rosenthal and Rosnow, 1991) in the development of conclusions about the co-management of the ERRP,

Case study analysis seeks to explore and describe an event or phenomena, evaluating the development of its characteristics in order to make conclusive statements about cause and effect relationships, or comparison of outcomes to hypotheses grounded in theory. Robert Yin (2003), in *Case Study Research Design and Methods* defines a case study as, “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 13). Case study methods are flexible, and include efforts to gather contextual information from a variety of sources, including theoretical hypotheses, in order to verify phenomena and describe their effects, “the case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points... it relies on multiple sources of evidence,

with data needing to converge in a triangulating fashion... and benefits from the prior development of theoretical propositions to guide data collection and analysis” (Yin, 2003, p. 13-14).

Various forms of information are gathered to assess the contextual factors that influenced the collaborative relationship between ERRP partners and led to its social outcomes. Data gathering occurred via the following phases:

Literature Review

The first stage of this case study includes an extensive literature review of relevant topics in order to obtain frameworks and institutional knowledge on co-management of natural resources with indigenous communities, tribal consultation in the United States, the government-to-government relationship and tribal sovereignty, treaty rights and co-management in Washington State, collaborative environmental management, environmental justice, and the ethnographic history of the Lower Elwha Klallam Tribe.

Exploratory Interviews

Once background information was gathered, exploratory interviews with individuals knowledgeable on the ERRP case (Auerbach and Silverstein, 2003) were conducted to both obtain guidance on this case study’s subsequent phases, as well as initiate contact with project participants and build relationships with potential interviewees. These relationships were approached carefully, as intergroup dynamics are subject to political context, historical events, and are sensitive to disagreement over aspects of the project currently underway. Great consideration was taken in regard to the sovereignty and privacy of the Elwha Tribe. Contacts for this phase of the project include individuals with close familiarity with the ERRP and/or the

contextual issues, such as local resource managers and environmental decision makers, members of the media who have reported on the Elwha Dam removal project since its beginnings, and local tribal leadership with insight into the role of the ERRP in the greater movement for environmental justice among western Washington tribes.

Key Informant Interviews

Elite-style interviews were conducted with the ERRP's primary project management participants to gather qualitative information to describe perceptions of co-management and participation throughout the ERRP. Interviews were sought from both of the ERRP lead partners, the NPS-ONP, and the Elwha Tribe staff, as well as other participants with close affiliation, such as legal representation, or consulting groups and other non-profits participating in the ERRP. Interviewees were identified via background research and initial exploratory interviews, and through the snowball method (Auerbach and Silverstein, 2003) for identifying additional contacts based on the recommendation and networking of other participants. As the ERRP is ongoing, much of the project's information is not available to the public; therefore participants' perceptions are essential in identifying process elements and evaluating impacts. With permission from the interviewee, interviews were audio-recorded and later transcribed. The University of Washington's Internal Review Board determined that this study does not qualify under the purview of Human Subjects Review; therefore, a formal signed consent form was not necessitated. However, the identities of interviewees are kept anonymous throughout this report in order to protect individuals' privacy. Each interview was given a code (Interview-1, Interview-2, Interview-3) in order to track responses throughout analysis and reporting. Quotes and excerpts used in the text of this report are cited using the respective interview code. The

interview guide is provided in Appendix A. At the outset of this case study, 12 key informants were identified via literature review and the recommendations received through exploratory interviews. Due to the time constraints of data collection, only three of those interviews were successfully conducted. These three were the primary informants and participants in the co-management between the NPS and Elwha Tribe, and their responses did provide representation of each entity's role and perceptions of co-management processes and outcomes. However, additional interviews would have further supported their responses and the conclusions drawn from them. The totality of information gathering throughout the literature review and interview phases provided a deep and comprehensive illustration of the events and processes of ERRP management.

Data Analysis

The qualitative empirical data consists of unobtrusive indicators such as interview transcripts, observational data (if available), and primary project documents. These data comprehensively analyzed to establish themes, and identify process elements, and make linkages to project outcomes (Rosenthal and Rosnow, 1991). These findings are then evaluated against co-management and collaborative management frameworks described in the literature [Koontz et al., 2004; Plummer and Fitzgibbon, 2004; Tipa and Welch, 2006; Haskew, 1990; Kuska, 2006) and found within U.S. government institutional frameworks (see below), with consideration of environmental justice issues and tribal sovereignty. Conclusions are drawn using the ERRP's outputs and outcomes, and stakeholder perceptions, as indicators of its successes and/or failures at implementing co-management between the NPS and Lower Elwha Klallam Tribe. .

BACKGROUND

THE ELWHA RIVER

The Elwha River watershed (Figure 1) is located on the Olympic Peninsula in Washington State, where it the Elwha River is the fourth largest river by drainage area on the peninsula (USDOI, , 1994) and flows into the Strait of Juan de Fuca, before reaching the Pacific Ocean. The river is 45 miles long, with a north-south orientation and over 100 miles of tributary streams comprising a drainage area of 321 square miles, of which 267 square miles (83%) are now located within Olympic National Park (USDOI, 1994). The maritime climate of the area is characterized by mild, wet winters and relatively cool, dry summers (USDOI, 1994). Western hemlock and Douglas fir generally dominate the forests, and the drainage area supports a transitional mix of plant species between the wet western peninsula and the comparatively dry eastern peninsula (USDOI/NPS, 1995).

Prior to dam construction, the Elwha River was home to one of the largest year-round salmon and steelhead runs of any river on the Olympic Peninsula, and supported all five species of Pacific salmon. A popular legend states, “so many pink salmon used to jam into the Elwha that they once lifted a canoe right out of the water” (Crane, 2011, p. 140). Native anadromous fish also returned important minerals and nutrients to the river. Two nutrients, phosphorus and nitrogen, often limit biological productivity in Northwest streams. Yet, each year, decomposition of the salmon carcasses probably provided more than 13,000 pounds of these essential nutrients to the Elwha River under natural conditions (USDOI, 1994, p. 36). The nutrients, absorbed by aquatic plants and animals, formed the base for an in- stream food chain which fed, among

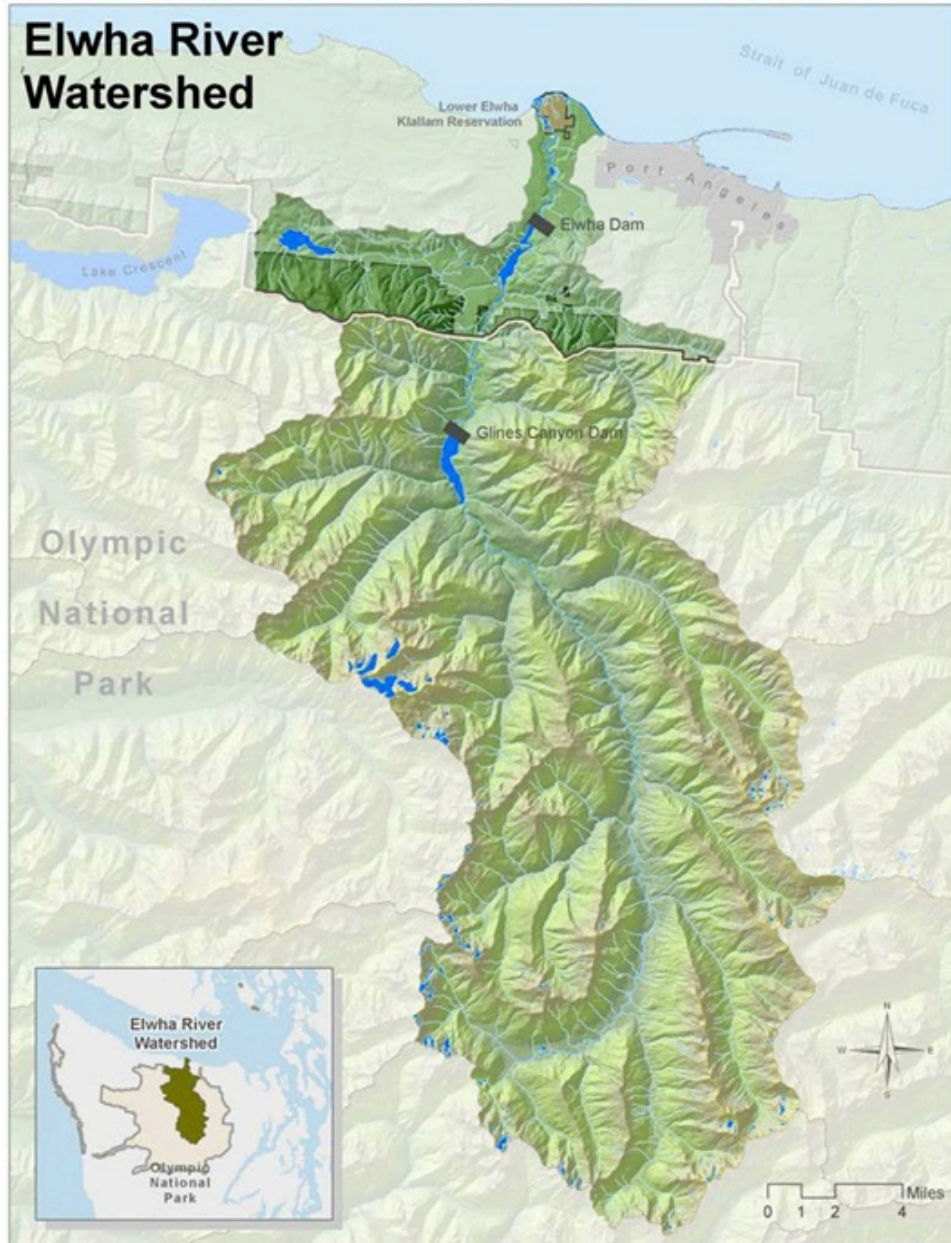


Figure 1: Elwha River watershed showing reservoirs prior to dam removal (Source: Olympic National Park)

others, the juvenile salmon and trout brought nutrients from the sea in the form of body weight or biomass all along the river and its tributaries.

“The river was well used by the 10 runs of native anadromous salmon and trout; there was no month of the year when one or another was not migrating upstream, spawning, rearing, or

passing juveniles out to sea” (USDOI/NPS, 1995). The river’s Chinook salmon were most highly prized, known for their enormous size, commonly found to be over 100 pounds. Elwha Chinook are genetically programmed to stay at sea longer than their salmon relatives originating from other streams. The extra time at sea enables the Elwha Chinook to grow to such large sizes, aiding them to pass the test of genetic selection with the strength to make it past steep and narrow river canyons to reach upstream spawning grounds (Crane, 2011). These fish were revered in the media, an article in the Seattle Time describes the historical Elwha chinook: “They came in spring – the biggest breed of salmon this state has known – and began their steep, grueling journey up 65 miles of river rushing from the majestic Olympic Mountains. These were the fabled Kings of the Elwha – salmon that tipped the scales at more than 100 pounds” (Hannula, 1990).

The Elwha River area also supports a variety of birds, large and small mammals, including the Roosevelt elk, amphibians, and reptiles...Small mammals include beaver, mink, river otter, and pine marten. Birds include numerous passerines, waterfowl, raptors, and marine species....At least 22 species feed in whole or in part on salmon or their carcasses, including black bear, bald eagle, mink, river otter, Pacific fisher, pine marten, long-tailed weasel, belted kingfisher, and common merganser (USDOI/NPS, 1995).

The mouth of the Elwha River presents an estuarine and nearshore environment that supports many plants and animal species including fish such as salmon, greenling, flatfish, rockfish, sculpins, clingfish, sand lance, herring; more than 50 species of marine algae (including kelp); birds, including gulls, common murre, marbled murrelets, rhinoceros auklets, and harlequin ducks; and mammals including the Pacific harbor seal and, infrequently, Steller and California sea lions, orcas, and gray whales...Nearshore substrates composed of boulders and

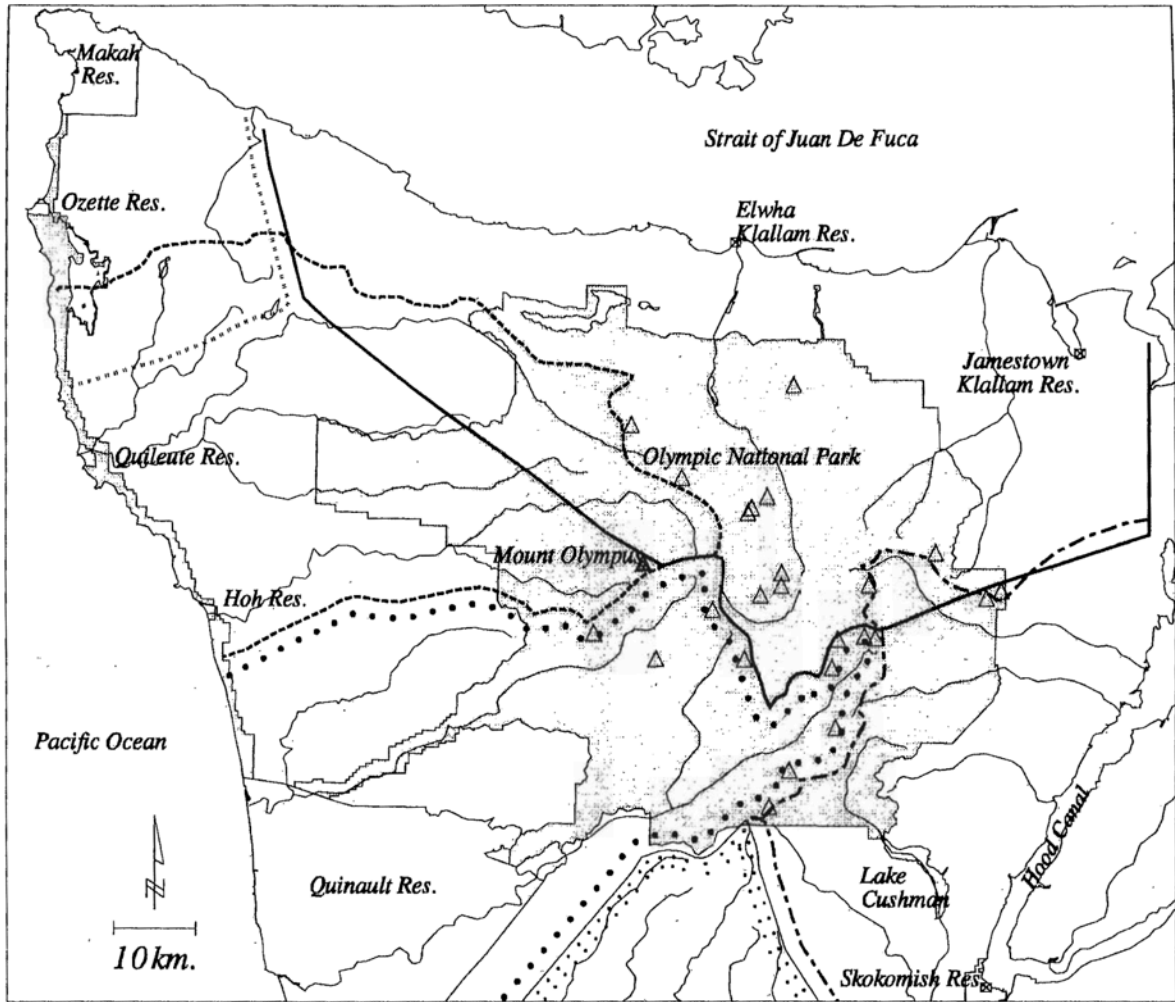
cobbles support species that prefer rocky environments, such as kelp (particularly important as habitat for various baitfish, which are productive prey species for salmon), many species of red algae, red and yellow sponges, red rock crab, barnacles, mussels, limpets, chitons, and periwinkles (USDOI/NPS, 1995). Despite this apparent species richness that remains today, the Elwha River ecosystem looks very different from prior to dam construction (USDOI/NPS, 1995).

Of these animals, many are species of concern for extinction, including the pacific fisher, four species of bats, the bald eagle, northern spotted owl, marbled murrelet, harlequin duck, northern goshawk, pileated woodpecker, northern red-legged frog, tailed frog, western toad, and pacific and brook lamprey (USDOI/NPS, 2005). The Chinook salmon and bull trout are federally listed as threatened species, and most other Elwha River anadromous salmon and trout have been listed as Washington state species of concern (USDOI/NPS, 2005).

THE LOWER ELWHA KLALLAM TRIBE

“The story of the Elwha River begins with Klallam people. They provide the common thread that weaves human history to the physical environment” (Crain, 2011, p. 17). Native Americans used the Elwha River valley for thousands of years prior to when the first European explorers reached the Northwest coast (USDOI, 1994). According to the tribal oral history, the Elwha Klallams have lived in the Elwha River country from time immemorial (Busch, 2008), their name “‘Klallam’ (also written ‘S’Klallam’ or ‘N’Sklallam’) translates as ‘the Strong People’” (Busch, 2008). Their name is rooted in the river, when someone asked at a large

assembly of Klallam gathered to feast and build a longhouse, who could lift a big log to the roof of the building, it was the Elwha who outmatched their competitors. With careful thought they



Historical Use Areas

- Chehalis Makah Quinault
- Klallam -·-·-·- Quileute/Hoh - - - - Skokomish

Figure 2: Map of Olympic Peninsula Native American historical use areas (Wray, 1997)

floated the log and walked it out into the river to where they were neck deep; there they put the log on their shoulders and walked out of the river carrying it, then hoisted it together to place it at

the top of the longhouse. At this sight, everyone shouted, “Klallam, Klallam!” meaning Strong People! (Crane, 2011).

The river is central to the culture of the Lower Elwha Klallam (Elwha Tribe), as shown by archeological evidence and oral tradition (USDOJ/NPS, 1995). Tribal tradition places the creation site of the Elwha people near the [former] site of Elwha Dam (Busch, 2008). They believed they were brought into existence on the river, formed from the dirt scooped out of deep holes in the rocks (Crane, 2011). Here they thrived on the natural abundance, with as many as 12 residential and camping sites on the river and along the Strait (Crane, 2011). The Klallam and other tribes inhabited much of the Olympic Peninsula, including the mouth of the Elwha River, up until the 1800’s (Olympic National Park, 2012). Figure 2 shows the historical use areas of the Olympic Peninsula tribes prior to European settlement. “Klallam families traveled up and over the Olympic Mountains to gather medicinal plants, berries, bear grass, and cattails, as well as to hunt for bear, deer, and elk. Villages were on the shores of the Straits, as well as upriver. Some areas were occupied on a seasonal basis, and some places year-round.

The Elwha River was a natural byway for subsistence activities, and also for social gatherings” (Lower Elwha Klallam Tribe, *Lifestyle*, 2011). The Lower Klallam Elwha were also active sealers, and caught smaller marine fish that schooled in great numbers in the shallow nearshore waters. They used sharpened elk bones to construct a rake employed in scooping herring into waiting canoes. To harvest their coveted eggs, hemlock twigs were placed in spawning sites, and collected after they were covered with eggs and let to dry (Crane, 2011). Elwha ingenuity was evident throughout their harvest activities, notably in their construction of large nets drawn on long poles with pulley systems to capture waterfowl in mid-air, and their extensive fish weirs and platforms. These intricate fish traps were operated via a hierarchical

family arrangement, allowing those most powerful in the community to occupy the most proficient weir sites, closest to the mouth of the river. “With salmon and steelhead swarming through the ocean to the Elwha almost every month of the year, the Klallam were almost always in pursuit of the fish so central to their economy and culture” (Crane, 2011, p. 24). Like other Salish tribes in the region, the Elwha participated in a



Figure 3: Klallam woman clamming at Point Hudson (Source: North Olympic Library)

first salmon ceremony to honor the return of the fish. The first salmon in a run was considered a chief of those salmon and was harvested and cooked in a traditional ceremony by the village shaman. The bones of the fish would be placed back in the river, so that the chief might return to the salmon people in their villages at the bottom of the ocean and bring them back again for the next spawning run (Crane, 2011).

From childbirth on, the Klallam forged a close and intricate relationship with nature; while the Klallam did not commodify nature in the way later settlers did, they understood the ways in which almost every organism in that greater ecosystem could be used (Crane, 2011). The abundant food helped enable the Elwha to develop a complex oral history and spirituality, providing both mythical and real stories of their cultural history (Crane, 2011).

The cultural resources still present today in the Elwha River valley include structures, landscapes, traditional cultural properties, ethnographic sites, ethnohistoric sites, and archeological sites, representing a continuous occupation from centuries past. They also demonstrate the importance of the Elwha River, which provided sustenance to the valley's inhabitants and served as a transportation corridor into the heart of the Olympic Peninsula

(USDOI/NPS, 1995). Prior to contact with Europeans and devastation by disease and conquest, the Pacific Northwest coastal Indians constituted some of the most complex and richest Indian cultures in the North American continent (Crane, 2011).

“The Elwha S’Klallam have lived in and utilized the river basin for thousands of years. Villages and fish camps, tribal history, and tribal culture are all integrally connected to the watershed and the river system” (USDOI, 1994, pg. 205,). The Elwha River was the heart of the tribe’s existence, providing the ceremonial, cultural and spiritual resources necessary for their survival; in this way, the entire river is a cultural resource (USDOI, 1994).

In 1855, the Point No Point Treaty (12 Stat. 933 (Jan. 26, 1855)) secured the tribe’s fishing rights in the Elwha’s usual and accustomed fishing grounds, however, they were barred from accessing those lands, and instead directed to relocate to a reservation on the Skokomish River, at the south end of Hood Canal (USDOI/NPS, 1995). The Elwha Tribe refused to leave. Lacking U.S. citizenship, tribal members were barred from obtaining homesteads on their ancestral homelands (USDOI/NPS, 1995). In 1884, the passage of the Indian Homestead Law opened homesteading to tribal members, and by 1894 ten members of the Tribe received trust patents to approximately 1,300 acres of land in the Elwha valley and on Freshwater Bay (USDOI/NPS, 1995). In 1916, however, state fishing restrictions banned tribal fishing outside of reservations (LEKT, 2011), but lacking citizenship, tribal members were not eligible for state fishing licenses, resulting in the arrest of many tribal members “Elders today recall their childhood years when they would sneak down to the river to fish because their families had no food. They tied the fish with twine and dragged them through the fields of tall grass to avoid the game wardens” (Wray, 2002, p. 25). “By the 1930’s the Elwhas were refugees in their own homeland, moving to increasingly less habitable settings as non-Indians claimed their land and

burned their homes” (Busch, 2008, p. 7). It wasn’t until 1935, after relocation and homestead conflicts, that a 372-acre reservation was established for the Lower Elwha Klallams at the mouth of the Elwha River (LEKT, 2011).

In 1992, the Elwha Tribe became a self-governance tribe (LEKT, 2011). As of 2009, the Elwha Tribe had 776 enrolled members, with 112 who reside on the Lower Elwha Reservation (NOAA, 2007). The reservation now consists of 433 acres (NOAA, 2007). With the Boldt Decision in 1974, the Elwha Tribe retained 50% of the salmon harvest in their usual accustomed fishing grounds outlined in the Treaty of Point No Point, the Elwha River. Unemployment on the reservation is 49% and per capita income is \$5,159 (NOAA, 2007).

EUROPEAN SETTLEMENT ERA

The first European settlers made it to the Olympic Peninsula in the late 1700’s, explorer Robert Duffin reportedly encountered Klallam Indians at Discovery Bay in 1788 (Lower Elwha Klallam Tribe, 2011). Stories of gigantic fish and endless natural bounty soon brought others. “Western Europeans and Americans have known about the remarkable king salmon of the Elwha ever since Spanish explorer Manuel Quimper purchased several Chinooks, each weighing 100 pounds, from Indians who were most likely Lower Elwha Klallam, near the Elwha in 1790” (Crane, 2011, p. 14).



Figure 4: Mary Chittenden holding an Elwha River steelhead (Source: Washington State Historical Society)

In 1853, the Washington Territory was established, and the Appropriation Act authorized the President of the United States to negotiate with Native tribes to extinguish title to their lands

in order to open the area for settlement by U.S. citizens (Lower Elwha Klallam Tribe, 2011). The Treaty of Point No Point was signed in 1855 between Washington Governor Isaac Stevens and representatives of the S'Klallam, Skokomish, and Chemakum tribes. The Elwha Klallams and villages are named in the treaty, constituting federal recognition of the tribe (Lower Elwha Klallam Tribe, 2011). At the time, an early census shows 926 Klallams occupying the area (Lower Elwha Klallam Tribe, 2011). Fearless American settlers soon began migrating to the area, sharing an impulse to tame and convert the landscape, evidenced by this passage written in 1860:

“The great Sierra of the Olympic range appears to come down quite to the water’s edge, and presents a wild and forbidding aspect. But as the land is neared we see the line of foot-hills, before dimly visible through the mist, now assume their proper form, and disclosing deep ravines, with fertile valleys lying between them, and reaching quite to the base of the great mountains of the coast range... gently undulating ground bearing the sturdy giants of the forest, offering inducements of various kinds to settlers to come and locate, and build up the towns and villages that are destined...to line the shores of the bays and coves...with the pleasant sight of white cottages sending up blue clouds of smoke from hospitable hearths.” (San Francisco bulletin, 1860)

But growth was slow for the first two decades in the new territory. By 1878, the Indian Wars and disease had relegated the Klallam population down to 597 people (Lower Elwha Klallam Tribe, 2011). “However, with the completion in 1883 of the Northern Pacific Railroad to Tacoma, the flow of settlers to the Northwest increased substantially (Crane, 2011, p. 39). In the nearby city of Port Angeles, the settler population was over 600 by 1887 (Lower Elwha Klallam Tribe, 2011). The railroad provided a two-way flow of capital and commodities, contributing significantly to the development and growth of Port Angeles. Historian William Cronon describes this era: “The railroad... facilitate[ed] the conversion of the landscape to a commercialized economy serving and served by urban centers, [and] wrought great changes on the land. Such was the case for the Port Angeles region...The welcoming hand of urban

capitalism extended its reach a little later there in the far northwestern corner of the United States” (Crane, 2011, p. 40).

In an unusual buck of the capitalistic trend, in 1887 a group of idealists led by a New York judge and a lawyer who met in Seattle, sought to create a utopian society in Port Angeles, called the Puget Sound Cooperative Colony. Historian Murray Morgan (1976) describes its creation, “Funded by one million mostly theoretical dollars... [the group] wanted to be the forerunner of a society untainted by capitalism” (p. 87). They purchased land at the mouth of Ennis Creek and built a sawmill, from which they milled the lumber for the construction of a store, cabins, a sloop, and a meetinghouse, “either respectfully or jokingly named Potlatch House” (Crane, 2011). Though they carried on domesticating the landscape, they also sought to domesticate capitalism, into a more moderate and less selfish form, attracting the support of town founders and boosters (Morgan, 1976). The colony went so far as to abandon the dollar for its own currency, awarded on the basis of labor performed (Crane, 2011). The group peaked at around 1,000 members in 1888, but the loss of its lawyer founder, and economic struggles brought its downfall; most of its members did stay in the area however (Morgan, 1976). Around this time, rumors of a transcontinental railroad with Port Angeles as its western terminus brought hope for further economic development in the region (Morgan, 1976).

CONQUERING THE FINAL FRONTIER

In 1890, Thomas Aldwell, (Figure 5) an enterprising young Canadian, arrived in Port Angeles with a vision of a potential metropolis, with “a harbor rimmed with vital industry with payrolls expanding, houses being built, and streets being laid... The raw material was here; raw materials that called for the minds and hands of builders who would think of this as a home to



Figure 5: Thomas Aldwell
(Source: Noreen Frink)

make for their children and their grandchildren and their great grandchildren” (Aldwell, 1950, p. 20).

Aldwell remarks in his autobiography, *Conquering the Last Frontier*, (1950) that at that time it took only a few minutes to walk from one end of Port Angeles to the other and canvass its possibilities” (p. 18). He makes only one comment on the Native Americans occupying the Olympic Peninsula, saying, “Between 200 and 300 Indians were living and camping on the beach in front of the town. Most of them had large canoes, handhewn from logs, and some practically lived in their canoes. They wore fancy costumes, especially the brides and grooms. The Indians made their living principally by fishing” (Aldwell, 1950, p. 18). Aldwell and his fellow settlers dreamed of a modern and thriving metropolis on the edge of the continent, “The West sounded easy: ‘Land of Opportunity’; ‘Plenty of Everything’; ‘Generosity’; ‘Friendliness’; ‘A man’s own worth and not his ancestors!’ These were catch phrases that we all believed. Events proved them true” (Aldwell, 1950, p. 20). Among other business leaders of the fledgling town, they “talked [them]selves into an awareness of the imaginative possibilities of the Peninsula. Why not a country flooded with electricity and power? Why not a preservation of the scenic beauties that would make it rival the Alps or the Lake Country? Why not a great sea port? Why not more industries than we could imagine?” (Aldwell, 1950, p. 30). His affection with the place grew, and he became enamored with the natural beauty and pioneering spirit of the West, making a name for himself through business dealings and real estate, he was quickly elected as Treasurer of the newly formed chamber of commerce. Aldwell recounts his feelings on that time: “There is

something about belonging to a place. You want to control more and more of it” (Aldwell, 1950, p. 26).

A DAM ON THE ELWHA

“The spirit of capitalism, so strong and unmitigated in the late 19th and early 20th centuries, played a fundamental role in the construction of the Elwha Dam as well as much development in the American West” (Crane, 2011, p. 53). A real estate boom was taking place in and around Port Angeles thanks to the Homestead Act, and parcels were selling for \$100 acre, sight unseen (Aldwell, 1950). Soon after Aldwell’s arrival, a local lawyer and residents of Port Angeles campaigned to take 3,100 acres from the federal land reserve that was designated as the original townsite because they believed it was blocking the town’s growth (Crane, 2011). They marched onto the land with axes and saws and forged their own homesteads, squatting on and proving up their claims by establishing settlement. They then applied pressure on representatives in Washington D.C. to provide them title to the land, which they eventually were granted in 1894 (Crane, 2011). Aldwell would not miss this opportunity, purchasing as many parcels as he could afford in town and on its outskirts. He was shown a parcel on a river bottom, with a canyon below, “through which the Elwha River thundered and 75 feet or so in front if it was a spring of crystal clear water...The scintillating rays of sun were coming through the branches and sparkling on the water. My life had taken me to schools, to cities, to business, but suddenly that spring embodied all of life and beauty I thought I’d ever want” (Aldwell, 1950, p. 58). That site would later become the location of the Elwha Dam.

In 1894, Aldwell met a visiting businessman interested in locating a power site nearby to power a future pulp mill in Port Angeles. Aldwell was fascinated by the idea of bringing such

substantial industry to town, and immediately thought of the narrow canyon on his homestead on the Elwha River. He showed his partner his land, “We looked at the canyon. Suddenly, the Elwha was no longer a wild stream crashing down onto the Strait; the Elwha was peace and power and civilization” (Aldwell, 1950, p. 80). He convinced his partner to purchase a half-interest in the property and provide the financing to obtain the three miles above the canyon necessary for flooding when the dam was developed (Aldwell, 1950). It took 12 years to secure the area, but Aldwell and his partner managed to keep their idea secret; they didn’t in fact have the capital, but traveled far and wide acquiring parcels from their owners. In the meantime, Aldwell had developed a booming real estate firm, with agents representing him at satellite offices in regional cities. It was here, in his agent’s office in Victoria, B.C. in 1908, that he met G.A. Glines, a wealthy real estate investor from Winnipeg. Glines became interested in the power project, and bought out Aldwell’s partner’s half-share, with the timber on the land going to Aldwell as a commission for the deal (Aldwell, 1950). Aldwell would not sell his own stake, “I would not consider selling. Mine was a dream of power that would transform a city. It was something I couldn’t sell” (Aldwell, 1950, p. 82). In his own words, Aldwell describes the process to obtain the financing and approval for the hydroelectric dam project as “a battle royal from start to finish” (Aldwell, 1950, p. 77).

Aldwell was not the first man so inspired to dam the Elwha. An article in the *Seattle Post Intelligencer* from 1901 describes the beauty and inspiration of the river, and its highest purpose to serve mankind (Crane, 2011), “The Elwha, sublime in its majestic and awe inspiring scenery, is destined to become a mighty power for good in the hands of ingenious humanity, for the present and future generations... There are many places along its course where its energy could be transformed into power for the use of the manufacturer, for lighting, for the tram car, for the

street car...the two best opportunities for the development of power are the lower of Aldwell's canyon, and the Upper canyon" (Seattle Post Intelligencer, 1901).

Aldwell next turned to obtaining financing for the project but needed to secure contracts and franchises in order to create a market for the power. He formed the Olympic Power and Development Company, consisting of prominent local leaders of natural resource corporations and lawyers. With the reputation of their board of directors, and an engineering report confirmed by the US government engineers, Aldwell and his group secured the power franchise from the City of Port Angeles, beating out a group of Seattle investors lobbying for a project on the Little River, just south of town (Aldwell, 1950). In order to start building, however, Aldwell still needed major financing, and he knew that "power in the West had to be financed in the East" (Aldwell, 1950, p. 85), so he headed to Chicago to persuade Peabody, Houghteling, & Company to finance the project. Soon word spread that the power project was coming to Port Angeles, and he was heralded in the press, including the *Seattle Times*, which wrote, "...it means that he has



Figure 6: Construction of the Elwha Dam (Source: Nippon Paper Group)

formed a financial connection with Chicago capitalists who will follow one another in exploiting this, the grandest and richest section in the Pacific Northwest" (Aldwell, 1950, p. 87). The Olympic Power Company was organized with the directors of the Olympic

Power and Development Company, and capitalized for \$2,000,000 (Aldwell, 1950). “In the case of Aldwell and the Elwha Dam, although he was to generate some local interest and investment, the construction of the Elwha Dam would never have been accomplished without substantial investment by the Chicago firm. It was their capital, much more than their expertise, that resulted in the damming of the Elwha” (Crane, 1950, p. 53). Though boosters spoke of the social benefits of extracting resources from the great natural-resource reservoir of the American West in the late 19th century and early 20th century, their fundamental interest was in creating capital and accumulating wealth (Crane, 2011).

Construction on the Elwha Dam (Figure 6) began in September 1910, 4.9 miles upriver from the river mouth, creating the reservoir known as Lake Aldwell (USDOJ, 1994). Two years into its construction however, a catastrophic blowout occurred, punching a deep hole in the gravel below the dam, and allowing the entire reservoir to empty in two hours (Crane, 2011). Elwha and non-Indian residents all suffered significant losses when the dam failed; a primary bridge crossing over the Elwha River was washed out and a mill was damaged, an Indian homesteader’s property was swept away in the resulting flood, and the topsoil of many farmowners’ fields were covered with debris, resulting in many people later moving their homes to higher ground (USDOJ/NPS, 1995). Additional financing was secured, and in early



Figure 7: Elwha Dam, prior to removal (Source: Smithsonian Magazine)

1913, construction began again and was finished by the end of the year. “The dam is a concrete structure consisting of a central gravity-type section with an adjacent buttress-type intake section... it is approximately 450 feet long at its crest and about 105 feet high. Lake Aldwell is 2.5 miles long, with a total storage capacity of approximately 8,100 acre-feet” (USDOJ, 1994). It generated 20,000 horsepower, which was transmitted over 110 miles, where it reached Port Angeles, Port Townsend, Bremerton and its U.S. Naval Yard, and other small towns (Aldwell, 1950). The power brought mills and increased timber production to Port Angeles. The local *Tribune Times* newspaper wrote of the community’s excitement that flipping the switch on the power plant would give Port Angeles “one of the best municipally owned lighting plants of any city of small size in the State of Washington” (Crane, 2011).

Despite the legal requirements set forth in the state of Washington’s first legislative session in 1893 that required fish passage through dams (Crane, 2011), and repeated reminding from the Washington State Fish Commissioner, in addition to complaints from local canneries, fish passage was not provided at the dam, effectively blocking upstream chinook, coho, chum, and pink salmon and steelhead spawning upstream, as well as the migration of sockeye salmon to Lake Sutherland, which was connected to the Elwha by Indian Creek (Crane, 2011). This lack of concern did not necessarily reflect a disdain for nature, but Aldwell strongly favored development, and would not let concern for salmon get in the way of his project. Aldwell embodied the philosophy of the pioneer, believing that wilderness was a barrier to progress and needed to be tamed, “The transformation of a wilderness into civilization was the reward for his sacrifices, the definition of his achievement, and the source of his pride” (Crane, 2011, p. 56).

In 1911, the Clallam County Game Warden wrote a letter to the State Fish Commissioner and warned about the dam’s impact on spawning salmon, “I have personally searched the Elwha

River & tributaries [sic], above the dams, & have been unable to find a single salmon. I have visited the Dam several times lately...and there appears to be thousands of Salmon at the foot of the Dam, where they are jumping continually trying to get up the flume” (Crane, 2011, p. 65). In response, the Superintendent of State Fish Hatcheries came to examine the dam and acknowledged that there were no fishways and no means by which the salmon could bypass the dam. “Further, he stated that although it was impossible to add effective fish passage at that time to the design of the dam, he was assured by the engineer in charge of construction that a fishway would be built as soon as the dam was in the final stages of construction. This never happened” (Crane, 2011, p. 65). Upon meeting with the Olympic Power Company, commercial fishers, the U.S. Bureau of Fisheries, Aldwell, and the dam engineer, the state fish commissioner proposed a plan to transport fish beyond the dam via a trap and elevator system that would lift them to the height of the reservoir (Crane, 2011). The Olympic Power Company was required to undertake this action, or else a functional fishway would have to be built, in accordance with the law. Aldwell ignored this demand.

When the dam blew out during construction in 1913, fish passage concerns were again raised. Leslie Darwin had just been appointed the new fish commissioner, with a reputation as a progressive, and was brought on by the governor to enforce fishing regulations more stringently (Crane, 2011). Immediately, Darwin openly criticized the fishing industry’s wasteful practices, breaking a pattern when such officials commonly held close ties with the industry (Crane, 2011). Darwin saw himself as a conservator of democracy, a member of the Progressive Movement, seeking to bring “restraint over a new capitalist era that while running amok threatened not only natural resources, but the freedom and opportunities of American citizens as well” (Crane, 2011, p. 67). He countered much of the unbridled capitalistic pursuit of mankind expressed by Aldwell,

with equally loquacious critiques, “The people of this state have an interest in perpetuating and maintaining our food and shellfishery, compared with the right of any individual, no matter how great his investment therein, sinks into insignificance” (Darwin, 1921, p. 14). Darwin was most concerned with equity and equal access to natural resources, which belonged to the people and whose benefits should be widely distributed, he wrote:

“Many of those interested in catching and canning fish lose sight of the fact that the state’s interest in our fisheries is paramount to the interest of any individual who engages in their taking merely for profit...It seems to me to be a crime against mankind – against those who are here and generation yet to follow – to let the great salmon runs of the State of Washington be destroyed at the selfish behest of a few individuals, who, in order to enrich themselves, would impoverish the state and destroy a food supply of the people.” (Darwin, 1921, p. 15)

Upon taking office, Darwin latched onto the issue of fish passage at the Elwha Dam and immediately pursued it relentlessly (Crane, 2011). After a series of letters between he and Aldwell, Darwin proposed the idea of a fish hatchery below the dam. Though he himself wrote of the preeminence of the state law, citing that no man had the power to supersede the requirement, he offered Aldwell a pragmatic compromise in the form of a hatchery, if Aldwell was willing to fund and build it (Crane, 2011). Aldwell again ignored Darwin’s offer. Growing exceedingly frustrated at the lack of response, Darwin sent Aldwell a short and clear letter in 1914, demanding a response within five days, or else he would issue an order to build the fishway, saying, “it is out of the question for us to allow another fish run to beat its brains out against the dam” (Darwin, 1914). Aldwell replied the following day, saying he was doing everything he could to find the financing for the site and construction of the hatchery (Crane, 2011). They eventually reached agreement on those terms. This occurred in the era when it was thought the proliferation of fish hatcheries would combat the rapid decline in fish populations,

enabling unmitigated development at the expense of natural habitat. The political climate at the time provided little option for more conservation and preservation-based solutions.

The hatchery solution proctored between Darwin and Aldwell required the fish commissioner to make statutory changes. While in other cases, he had willingly dynamited earthen dams, the heavier infrastructure of massive concrete dams and their hydroelectrically purposes (and strong political support), encouraged a more pragmatic and realistic approach (Crane, 2011). On the Elwha, the solution did not last for long. In 1919, the dam was sold to a subsidiary of Crown Zellerbach to provide electricity for a paper and pulp mill in Port Angeles. By 1921, few fish were returning to the Elwha, and two years after Darwin left his post as fish commissioner, the hatchery was abandoned in 1923 (Crane, 2011). No further efforts made for fish passage at the dam (USDOJ, 1994). The dam was never officially licensed, since it was completed prior to the creation of the Federal Power Commission (FPC) which was later granted the authority to license dams under the Federal Power Act (FPA); 16 U.S.C. 791-828c as amended; Chapter 285, June 10, 1920; 41 Stat. 063)) in 1920 (Winter and Crain, 2008). Roughly a decade into the 20th century, the previously free-flowing Elwha River and its legendary salmon runs had been effectively stopped (Figure 7).

In 1926, construction began on the second, Glines Canyon Dam (Figure 8), 8.5 miles upriver of the Elwha Dam, resulting in the creation of the Lake Mills reservoir. This dam was a technological achievement for its time, and another monument to local development and the determination to exploit the river (Crane, 2011). The structure is a varied radius, single arch concrete dam that is 210 feet high and varies in width from 55 feet at its base to 270 at its crest. The Lake Mills reservoir provides about 30,000 acre-feet of active storage” (USDOJ, 1994). In 1926, the FPC (the precursor to the Federal Energy Regulatory Commission (FERC)) granted a

50-year license for the dam, as fisheries impacts were not considered because the Elwha Dam downstream had already blocked fish migration (USDOJ, 1994). Soon after its completion, the increasing hydroelectrical development in the region and market dominance of larger power companies took away local demand for Elwha River power and it was increasingly diverted to a single mill, as Port Angeles was receiving power from other sources (Crane, 2011). Plans for another two dams on the river were abandoned after the construction of power lines to the Olympic Peninsula in 1949 made them superfluous (Crane, 2011).



Figure 8: Glines Canyon prior to dam (Source: Nippon Paper Group)

IMPACTS OF THE ELWHA RIVER DAMS

Industrial development was no stranger to catastrophe in the burgeoning time of the early 1900's, and the construction of the Elwha Dam was no different. There were multiple deaths associated with both the dams' construction and during its massive blowout. On that day there were a number of visitors at the dam, and a married couple from Norway were killed by the flying cables and careening trees with the derrick that broke free; another death occurred when a worker fell over the top of a dam (Crane, 2011).

The overexploitation of resources during the industrialization era resulted in economic booms and busts that left incredible environmental damage – and in the peripheries of the nation, such as the Olympic Peninsula, regulation of resource use was weakly enforced (Crane, 2011).

The apparent abundance of resources made conservation appear like a lost cause, while the profit from resource extraction occurred according to the insatiable market, with little regard for consequences.

Environmental Impacts

The presence and operation of the dam projects without any fish passage caused severe problems for the 10 runs of native anadromous fish, the ecosystem, and the Elwha Tribe living on the lower reach of the river. Despite Darwin's constant pressure, and after the failure of the hatchery, the WDF began receiving inquiries into the fate of the rapidly declining river habitat and its salmon runs (Crane, 2011). The dam operators ongoing refusal to manage the water flow so as not to destroy downstream salmon demonstrated their belief that the river was primarily an industrial resource, and was further exacerbated by the political constraints on the state which prevented it from doing anything about it (Crane, 2011). Local residents continued efforts to pressure the WDF to make efforts to preserve the fish runs. Ernest Brannon, the manager of the nearby hatchery on the Dungeness River kept an eye on the Elwha, and observed a substantial run of large fish and many fishermen present at the base of the lower dam into the 1930's (Crane, 2011). He implored the WDF to enable him to collect their eggs and re-establish a hatchery on the Elwha, with little response. Brannon's alarm was heightened by his observations of the haphazard way in which the dam operators managed the river's water flow, cutting the water off at times and stranding fish in holes in the riverbed, or onshore where they would die. Another local resident remembers in 1938 when the average flow would drop from 1,500 cubic feet per second (cfs) to 10 cfs, "There were people everywhere gathering up these beached Chinook. This is at almost the height of spawning time... I've seen the edges [of the river] clearly silver carpet

[sic] with fry, fingerlings, stranded. I have seen them drop it so fast adult Chinook were stranded. They did anything they wanted to and it was all bad” (Crane, 2011, p. 95). Alternatively, they would raise the water level so high and fast, that fish were flushed over the banks and stranded. Elwha Tribe elder Adeline Smith remembers her and other kids efforts to rescue the fish, “They’d open the dams and just let the water, you know, come down... there would [be] puddles of water all over and the little fish would be in there...we’d put a little water in [our buckets] and we’d pick up the fish and keep putting them in there. Then we’d bring it to the river and dump them in. We were trying to save the little fish because, you know, those puddles would dry up and those little minnows would be dead” (Crane, 2011, p. 96).

The Elwha River dams cut off more than seventy miles of high-quality mainstream and tributary anadromous salmonid habitat (Figure 9); most of which was later placed in inside Olympic National Park and protected from development. “The dams are the primary cause of the precipitous decline of salmonid populations to fewer than 3,000 naturally spawning fish today compared to an estimated 392,000 fish prior to dam construction. The loss of fish from 93% of the Elwha River has resulted in severe impacts to the entire Elwha River ecosystem due to the loss of nutrients and carcasses and the effects on aquatic and terrestrial vegetation and wildlife”



Figure 9: Chinook salmon swim up to the base of the Elwha Dam (Source: Seattle Times)

(USDOI/NPS and EPA, 2005, p. 3). The recruitment of large woody debris from the upper watershed has been virtually eliminated and the two reservoirs serve as “heat sinks” during the summer, dramatically increasing water temperature (Ward et al., 2008). The five miles that remain below the lower dam have been severely degraded by altered flow, altered nutrient and sediment regimes, and thermal loading (Busch, 2008). The cumulative effects of the two dams leave the freshwater and marine habitat available to salmon below the Elwha Dam severely degraded (Ward et al., 2008). “By changing habitat downstream and barring fish from quality habitat upstream, the dams have altered the entire ecosystem of the Elwha River valley. Terrestrial wildlife that previously fed on the salmon lost a year-round, stable supply of food. Since decaying salmon carcasses are an important source of nitrogen and phosphorus to the aquatic food chain, their absence has altered the river ecology as well” (USDOI/NPS, 1995).

Local residents continue to solicit the WDF for a solution, repeatedly asking to rebuild the hatchery. Francis Pearson, Congressman for the Twenty-fourth District, which includes Port Angeles, took up the helm for his constituents and wrote to the state fisheries director Brennan telling of the water flow issues, and asking for a response to appease the local fishermen, who had even volunteered their efforts to move the spawn to a nearby hatchery (Crane, 2011). The Director responded in great detail, with a letter outlining the history of the dam and previous Director Darwin’s attempted solutions and dealing with Aldwell’s power company: “This contract, that was entered into and signed by the State of Washington, is so binding that there seems to be little or nothing that can be done further with protecting fish life in the river with the operating companies.” (Crane, 2011).

Darwin had unwittingly given the dam owners free use of the river in any manner they wished, with no responsibility for the fish (Crane, 2011). Brannon further explained that it was leakage from the bottom of the dam that kept the fish runs alive at all, without which the river would have been dry at crucial spawning times, definitively extirpating the Elwha River salmon populations. He expressed the Department’s desire to find a solution, but that they were handicapped by the existing contract, though he hoped their ongoing efforts would find a

loophole to require better water flow management, as well as a positive outcome for the transfer of spawners to the nearby Dungeness hatchery if local support continued (Crane, 2011). Sadly, the subsequent fisheries director did not share this optimism. A letter he wrote expressed the political realities of the situation, “the State has been powerless concerning the construction of dam on this stream since 1914...This contract is a legal binding action upon the State of Washington which prevents any ordinary actions by this department towards the passing of fish over this dam” (Crane, 2011, p. 99). Local activism continued, and subsequent fisheries directors expressed their disdain for Darwin’s contract, including Director Milo Moor in 1946, “You may be assured that this Department is not in accord with the original contract, now [sic] do we believe that the dam owners and operators are properly fulfilling their obligation to the migratory fish in the Elwha River” (Crane, 2011, p. 99).

In 1951, a letter to the WDF from the North Olympic Peninsula Chapter of the Poggie Club expressed the locals’ increasing hatred of the dams, “The conditions existing on the Elwha River concerning the salmon and trout fingerlings are about as sorry a mess as can be found” (Crane, 2011, p. 100). By this time, the Washington Department of Fish and Game and the U.S. Geological Survey were also hearing from local dissidents and became involved, calling for monitoring of stream flow levels below the dam.

Cultural Impacts: The Klallam without Salmon

“The Lower Elwha Klallam lost access to their most important resource when the dam was constructed, furthering the damage to a culture and economy that had been ongoing since the arrival of disease epidemics and the 1855 Point No Point Treaty” (Crane, 2011, p. 64). The list of cultural resources damaged or lost in the Elwha River dam projects is perhaps impossible to

measure. There are four main areas of special meaning for the tribe within the general project area along the river. Some of the sites therein are listed in Table 1.

The original environmental impact statement (EIS) states: The cultural fabric of the [Elwha Tribe] has been adversely affected by the presence of the projects and ensuing loss of fisheries resources (USDOJ/NPS, 1995, p. 76). In a comment letter following the draft release of the initial EIS, Bill and Beatrice Booth explained the Elwha Klallam's unwavering connection to the river:

“Despite the damage done by the projects, an undiminished "spiritual" linkage maintained for generations by members of the Lower Elwha S'Klallam tribe, continues. It was perhaps best expressed by a former tribal chairperson, Carla Elofson, when she spoke before the Senate Committee on Energy and Natural Resource, June, 1992: ‘Our Creator gave us the fish to live on...and we cherished it, and we respected it. We didn't waste it, we used every bit of it. I may not see the abundance of fish come back in my lifetime, but I would like to see it come back for my grandchildren, my great-grandchildren, and the rest of my people, the following generations to come. It was a gift from our Creator; it was our culture and heritage.’” (USDOJ/NPS, 1995)

Although the dams provided electricity to a timber mill in Port Angeles, “it also preempted the greatest part of the salmon resource secured to the Lower Elwha S'Klallam by the Treaty of Point No Point and severely affected the tribe's social and economic well-being” (USDOJ/NPS, 1995). The destruction of the salmon fishery “has combined with an almost total lack of effective access to alternative economic opportunity to leave Lower Elwha S'Klallam people today as the most economically disadvantaged group in Clallam County” (USDOJ/NPS, 1995).

“Despite these difficulties, and the currently depressed level of fish harvests, Elwha fisheries continue to play a central role in tribal economic activity, culture and ceremony, and to offer hope for their improved future. Tribal elder Beatrice Charles recalls when she was a young girl, in 1919, when the fish were still running strong up to the dam and schools of them would jump, filling their pots they kept down by the river for boiling the gathered salmon (Crane, 2011).

Table 1: Elwha Klallam Cultural Sites in the Elwha River Ecosystem Restoration Project Area

Sites of Special Significance	
Thunderbird's Home	Many S'Klallam stories mention Thunderbird, who provides extraordinary spiritual power, and place his home within the valley. Thunderbird is a powerful figure, accorded much respect.
Creation Site	The spot where the creator formed the Elwha people [was previously] inundated by Lake Aldwell.
Cleansing Site	Also [previously] under Lake Aldwell. It has been described as a place where people went to purify themselves and receive spiritual guidance
Prophecy Hole	Just above the Elwha Dam, where S'Klallam people went to receive guidance and get a glimpse of their futures
Villages/ Seasonal Camps/ Smokehouses	An Indian village with permanent housing and both permanent and season residents was located near the confluence of Indian Creek. Another settlement was reported some twenty miles inland by anthropologist Erna Gunther. Seasonal hunting and fishing camps were located on the river near the mouth of Boulder Creek, and on Hayes River in the upper Elwha. Smokehouses were documented on Little River and Indian Creek, and above Glines Canyon near what is now Lake Mills
Burial Areas	Burial grounds are associated with all permanent villages, although their exact locations are unknown. A single grave, indicative of war or disease, containing S'Klallam relics and more than 40 skeletons was found on the Lower Elwha
Other Named Sites in Project Vicinity	
Esna'wL	"Enclosed by a canyon"; The site of the Olympic Power Company
Tcitsq!o's	"Place where there are holes in the face of the rock"; Near the power plant
Tea pe'tsln	"Mouth of the steep place"; Vertical cliff near the power plant
Cate'a'i	"Where one pounds sinew on a rock"; A boulder above the cliff, where sinew may have been made in sinew rope
Sa iyo'qtEn	"Where they bathe"; Above the power plant
TestctLlexEd	Diminutive of "hell"; Above the fork of Indian Creek
Outside of the project area	
Power sites	Far up in the mountains are basins with water which gave the Elwha Klallam a mysterious power over other Indians, allowing them to call people from long distances. The Klallam also used a "talking power" to persuade their own longhouse poles to lengthen or shrink
Indian homesteads	Following European contact, several Indian homesteads were patented within the river valley
Seasonal camps	In the mountains above Lake Mills, there are several specific sites where Klallam families established seasonal camps for hunting, fishing, and gathering of plants and berries
Cable ferry	During reconstruction of the Elwha Dam, and Elwha tribal member ran a cable ferry across the river, at the Lower Elwha Wagon Bridge location

Adapted from USDOl, 1994: Appendix L

It was not long before those opportunities were no longer available to the Tribe. The passage of state fishing laws to protect fish population barred Native Americans from fishing because they were not yet considered U.S. citizens. Many of them faced criminal charges in order to continue fishing at their traditional sites. Over the following decades, however, the Elwha River salmon runs began to collapse into a fraction of what they once were. Laws forbidding the hunting, fishing, and gathering, and loss of land to settlers, and loss of sediment flow due to the dams, degraded the downstream environments and beach area at the mouth of the river. The decline of clam resources further diminished the heart of the Klallam community (Crane, 2011). In her book, *Breaking Ground: The Lower Elwha Klallam Tribe and the Unearthing of Tse-whit-zen Village*, Lynda Mapes (2009) describes the condition of the Elwha Tribe in the 1920s: “they were forced, like the fish, to subsidize the wealth of the newcomers with the sacrifice of their food, their homeland, even their very lives” (p. 74).

Tribal chairperson, Frances Charles, describes the future of the tribe, without its natural resources:

“I hate to think of the future, especially for our children, if our resources aren't there--the fish, the nature, the wildlife, the plants-- which have always been provided for us. Our ancestors were raised to protect the river. They raised us to protect the river. We must be even stronger in the future--protecting what was given to us for our children, and for our children's children-- and valuing what we have.” (USDOI/NPS, 1995)

Besides breaking the legal requirement for fish passage and operating unlicensed, the Elwha Dams, also violate the federal trust responsibility to the four affected Indian tribes (USDOI/NPS, 1995). The continued decline of the river, estuarine habitats, and coastal ecosystem initiated a quiet dialogue about the now secondary purpose of the river, as a fish producer and critical component of the wider ecological and social system. That dialogue continued to grow in

volume, and eventually form in protest to the industrial Elwha River, bringing with it an unprecedented call to tear down the dams (Crane, 2011).

THE OLYMPIC NATIONAL PARK

In 1909, President Theodore Roosevelt had declared a sizeable forest reserve in Clallam County to be Mount Olympus National Monument, under the jurisdiction of the U.S. Forest Service. The Antiquities Act of 1906, authorized the President to “declare by public proclamation [as national monuments], historical landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled” by the U.S. government (16 U.S.C. 431), and was the U.S. government’s first national historic preservation policy (McManamon, 2000). Subsequently, The National Park Service Organic Act of 1916 (16 USC 1-4) created the NPS under the Department of the Interior (DOI), to protect and regulate the use of the federal areas known as national parks, monuments, and reservations (USDOI/NPS, 2006) under a mission to “to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of future generations” (USDOI/NOS & EPA, 2005) and to conserve park resources and values (USDOI/NPS, 2006). Park managers must minimize and seek to avoid to the greatest extent practicable, adverse impacts on park resources and values, provide enjoyment, derive benefit and inspiration for the people of the United States, including both people who visit parks and those who appreciate them from afar (USDOI/NPS, 2006). Congress have given the NPS discretion to manage impacts within parks, however that discretion is limited by Congressional statute, that park wilderness resources and values must remain unimpaired and exist in a condition that will allow American people to enjoy them in the present and future, as required by the Wilderness

Act (USDOJ/NPS, 2006). Later in 1964 Congress passed The Wilderness Act (16 U.S. C. 1131-1136), creating a criteria to designate wilderness areas which were to be protected in their natural state for perpetuity. The Wilderness Act, and directs the NPS, to study the wilderness and values to be included in the NPS comprehensive planning framework for each park and incorporated into park comprehensive plans, for the designation of park wilderness areas according to the criteria outlined in the Act (USDOJ/NPS, 2006).

Between 1919 and 1929 the area designated for the Mount Olympus National Monument was reduced to 332,000 acres, and in 1934 a national park of 420,000 acres was recommended (Aldwell, 1950). Conservationists lobbied for a larger park and in 1938, the National Park was established on 648,000 acres, although it soon increased to 900,000 acres in 1940, including an ocean strip on the western edge of the peninsula (Aldwell, 1950). Founded in 1938, the ONP is managed under a mission to:

“Preserve for the benefit, use, and enjoyment of the people, the finest sample of primeval forests of Sitka spruce, western hemlock, Douglas fir, and western red cedar in the entire United States; to provide suitable winter range and permanent protection for the herds of native Roosevelt elk and other wildlife indigenous to the area; to conserve and render available to the people, for recreational use, this outstanding mountainous country, containing numerous glaciers and perpetual snow fields, and a portion of the surrounding verdant forests together with a narrow strip along the beautiful Washington coast.”
(USDOJ/NOS & EPA, 2005)

Not everyone celebrated the creation of the new National Park. There were many in the region who believed that the federal government was infringing on their rights as citizens by taking prime forest land out of production and banning hunting and fishing from the abundant natural area encompassed by the park boundary. It was thought that the vast forests of the Pacific Northwest, if managed correctly, would sustain man’s industries forever, and any lessening of that potential would stifle man’s progress. This debate was rampant at the time, and Aldwell

describes the attitudes springing from two different interpretations of the idea of “conservation,” one being the conservationists who believe that the vast wilderness should be locked within the boundaries of the park, “inaccessible for those who would harvest trees for the sustenance of human life and activity” (Aldwell, 1950, p. 155), and those who take a more “modern” interpretation, advocating for the use of our resources for employment, as well as natural beauty and enjoyment, while preserving habitat, and replenishing the resource wherever possible (Aldwell, 1950). He describes the “bread-and-butter” side of the controversy, with incredible absence of retrospection for the humanity that existed before him:

“Thousands of people on the Olympic Peninsula have always gained their livelihood...from the payrolls of forest product industries. They have set down their roots, built their homes... The very thought of giving up their jobs or leaving their communality is repulsive... The pioneers who have helped develop this Northwest corner of America, the people who have come here and staked their lives on this Peninsula, depending on its natural resources to sustain them, are entitled to have their faith in our country perpetuated.” (Aldwell, 1950, p. 157)

Aldwell supported the idea of an Olympic National Park, he even donated some of his own land to be preserved as a natural area and thought there was no scenic area in American that exceeded it, but believed that the whole area, including its denizens made a complete picture of the wilderness in the heart of the Olympic Peninsula, and advocated that “we have a moral right to have a portion of [the ONP] area transferred back to the U.S. Forest Service, where it can be logged” (Aldwell, 1950, p. 157).

The majority of the Elwha River (83%) lies within the boundary of the ONP. As such, 70 miles of the upper reaches of the Elwha River have remained in a pristine state since the ONP was designated, in 1938; this area includes the majority of the lands inundated by Lake Mills, above the Glines Canyon Dam (USDOJ, 1994). The ownership of the property where Glines

Canyon Dam sits has been a source of debate over the years. It is within the boundary of the ONP, but on a parcel that was kept in private ownership.

The ONP was officially designated as wilderness under the 1988 Wilderness Act (102 Stat. 3961), which declared that all national parks in Washington state as wilderness areas. The dam projects on the Elwha River explicitly conflict with the Wilderness Act and park objectives to preserve wilderness:

“Management is based on the minimum requirement concept, allowing only those actions necessary and appropriate for administration of the area as wilderness and that do not cause significant impact to wilderness resources and character. Implementation of such actions is done using techniques and types of equipment necessary to ensure that impacts on wilderness resources and character are minimized.” (NPS/ONP, 2008, p. 32)

These policies and objectives are more than just local or even national concerns. In 1976, the park was designated as an International Biosphere Reserve and in 1981 gained the distinction of being named a World Heritage Site (USDOJ/NPS, 1995). The conflict between the founding legislation of the NPS and the parks’ stated missions, and the ecologically destructive dams both located within a park boundary and impacting park resources is discussed in later sections.

AMERICAN INDIAN LAW AND POLICY

HISTORY OF THE NATIVE AMERICAN AND U.S. GOVERNMENT RELATIONSHIP

Early Indian Removal Era: up to 1840

The founding years of the new American republic was rife with conflict, as settlers and frontiersmen clashed with Native American tribes as they encroached on their lands throughout the newly formed territories. President Washington and the Congress became exasperated and began discussing plans to move the Indians westward. The Indian Removal Act was formally

signed by Congress in 1830 and provided a justification for preserving Indian culture by removing Native Americans from conflict with white settlers (Carter, 2011). This act subsequently led to the infamous “Trail of Tears,” and other massive relocation efforts with drastically disruptive and destruction impacts (Carter, 2011).

Treaty Era: 1840- 1871

When the United States was founded, the newly formed nation’s policies followed the example of England and utilized treaties as its centerpiece of diplomatic relations with Native American tribes (Carter, 2011). This was an effort to prevent conflict by separating Indians and new settlers, however, frontiersmen proved to be difficult to contain and frequently infringed on Indian land, resulting in an intense period of pacification and war. By 1871, more than 370 treaties had been ratified between the United States and Native tribes, though neither the Congress nor the Supreme Court had been definitive in defining the relationship between tribes and states (Mason, 2002).

Since the treaty era, the U.S. Supreme Court has articulated specific principles concerning the interpretation of treaties and other agreements with Native American tribes that differed from interpretive principles applied elsewhere:

1. Treaties are to be interpreted as the Indians who entered into them understood them.
2. Any ambiguities in the treaties are to be resolved in favor of the Indians.
3. The Supreme Court will not conclude that a treaty has been abrogated by a congressional act unless there is clear evidence that Congress considered the conflict between its action and a treaty and chose to resolve that conflict by abrogating the treaty (Goodman, 2000).

These principles helped illuminate the foundational premise of the trust obligation owed by the United States to Indian tribes (Goodman, 2000). In *Cherokee Nation v. Georgia* in 1831, Chief Justice John Marshall “characterized tribes as ‘domestic dependent nations’ and concluded that

‘their relation to the United States resembles that of a ward to his guardian,’ resulting in a broad and ill defined obligation for the United States to protect the rights and assets of Indian peoples and tribes” (Goodman, 2000, p. 291). This obligation holds the federal government to a higher standard of compliance and regulation. The mismanagement of Indian property to detriment of the tribe provides just claim for compensation against the United States. Effectively, the trust doctrine compels the federal government to take affirmative and preventative action to protect tribal lands and resources.

Allotment and Assimilation Era: 1871-1928

Once the Louisiana Purchase was secured, and the American territory spread further West, conflict between settlers and tribes increased. War and forced containment became leading elements of U.S. Indian Policy, as the U.S. military met strong plains tribes who also exerted substantial military power – this era saw the end of treaty making, as it was removed from the policy repertoire (Carter, 2011). The U.S. Supreme Court also recognized at this time the plenary power of the Congress over Indian affairs (Carter, 2011). Subjugated and confined to reservations, tribal government withered, cultures fell into social disarray from dislocation, and dependency and poverty grew (Carter, 2011). Many Americans grew to believe that the only humane policy to deal with these “remnants of a civilization” was to assimilate them into mainstream society (Carter, 2011). The tribal community structures were considered contradictory to these efforts and many aspects were forbidden. Children were forced to attend Christian boarding schools and forget their native languages. The General Allotment Act of 1887 (The Dawes Act), allotted each tribe members a parcel of land, with the expectation that they would become farmers and civilized members of society. In some instances, the Dawes Act

facilitated U.S. citizenship, however, it was much later that a general grant of citizenship was extended to American Indians, in 1924 (Carter, 2011). After individual allotments were made, the remaining reservation land was considered to be surplus and returned to the public land inventories, open for settlement by non-natives, representing a massive loss of land, and economic blow, from which many tribes have never recovered (Carter, 2011). The Dawes Act also allowed individuals to sell off their allotments of land, which many businessmen saw as an easy opportunity to grab up good land for cheap from cash poor tribal members, further fragmenting tribal community structure. It is important to note that not all tribes saw the full range of these problems, as some withstood these attempts at fragmentation, and maintained community and cultural structure. However, it does represent the poor “one size fits all” policy regarding Native Americans.

Indian Reorganization Era: 1928-1945

The Brookings Institution (1928) released the comprehensive Meriam Report, examining 95 reservations and federal Indian policy in 847 pages. The report found that the federal government was doing a poor job of protecting Indian lands and providing social services, as granted in the treaties and legislation (Carter, 2011). President Hoover immediately responded to the recommendations in the Meriam Report, and set the groundwork for new legislation under President Franklin D. Roosevelt. The Wheeler-Howard Act (commonly known as the Indian Reorganization Act (IRA)) brought “New Dealers” to Indian reservations to encourage tribes to form institutionalized government structures, with constitutions, codified laws, and corporate identities to privatize business (Carter, 2011). Some tribes refused to participate, however, this

era brought the tribal identities of functional governments we know today, and brought with it a new approach to government-to-government federal-tribal partnership (Carter, 2011).

Termination Era: 1945-1968

The Eisenhower administration helped usher in a period reminiscent of past assimilation efforts for Native American communities, and a backlash to the increasing autonomy and functionality of tribal governments:

“The stated aim of Congress in adopting a termination policy was to ‘make the Indians within the territorial limits of the United States subject to the same laws and entitled to the same privileges and responsibilities as are applicable to other citizens of the United States...’ however, behind this bland language is the contemplated abrogation of hundreds of treaties, the abandonment of any federal fiduciary responsibilities to Native Americans.... and a reversal of more than a century of U.S. law and practice” (Carter, 2011, p. 213).

Congress passed laws in the 1950’s ending the special relationship between tribes and the federal government, while some targeted specific tribes, aiming to assimilate lands and increased the role of state governments in Indian affairs. Some believed that Relocation programs were doing tribes a favor by releasing them from the bureaucracy of the Bureau of Indian Affairs (BIA), but tribes were completely unprepared to be stripped of their legal status, and have their government structure removed upon a vote in Congress (Carter, 2011). This removed many tax exemptions, and trust responsibilities of the federal government, which played a large role in environmental and natural resource protections for tribes.

Tribal Self-Determination Era: 1969-Current

In a backlash to the termination era, tribal leaders started emerging and organizing in response to the impacts the new policy quickly had on their communities. In 1961 in Chicago, the American Indian Chicago Conference was convened and produced a “Declaration of Indian

Purpose: The Voice of the American Indian,” which became part of the Kennedy administration’s impetus for new directions in Indian policy (Carter, 2011). In 1964, the American Indian Capital Conference on Poverty followed, and leading political and media figures participated. The subsequent Kennedy-Johnson approach to Indian policy was likened to that of Roosevelt’s New Deal, showing respect for tribal cultures and encouraging economic development on reservations, while also paternalistic and shut off from true Indian inclusion in policy formation (Carter, 2011). The Red Power movement arose during this period, attracting more attention to the historical treatment of Native Americans. In 1969, the occupation of Alcatraz Island inspired more activism and political acts by Indian rights activists. Concern arose, prompting the legislature to act. The Self-Determination Act of 1975 sought to improve economic, social, and medical programs for native peoples and to strengthen tribal governments (Carter, 2011). Congress also created the American Indian Policy Review Commission in 1975, which published a report calling for strengthened tribal sovereignty (Carter, 2011). These gains were tempered by the lingering impact of the federal termination policy, and outcry from non-Indians over the increase of tribal jurisdiction.

President Nixon is credited with bringing an end to the federal termination policy and emphasizing a policy of self-determination (Carter, 2011). In a strong denunciation, “he called termination ‘morally and legally unacceptable’” (Carter, 2011). The Indian Self-Determination and Education Assistance Act (ISDEAA) of 1975 represented a new approach in U.S. Indian Affairs. The ISDEAA offered tribes the opportunity to take over control of many programs previously served by the BIA via funding contracts negotiated on an annual basis (Kenney, 2012). Prior to the ISDEAA, only 1.5 percent of BIA programs were administered by Native American tribes and organizations, while today, over half are tribally operated (Kenney, 2012).

Presidents Carter, Reagan, and Bush Sr. did not make significant change to Indian policy, some showing better understanding than others. President Clinton, however, took unprecedented steps by hosting a White House meeting in 1994 with the Cabinet and over 300 Native American leaders, where he issued Executive Order 12875 on “Enhancing the Intergovernmental Partnership” between executive departments and tribes, which was reinforced with a memorandum (Carter, 2011). EO 12875 requires all federal agencies to operate within a government-to-government relationship with federally recognized tribal governments (along with state and local governments) prior to taking actions, and to their rights and concerns before instituting projects and programs (Carter, 2011). The 1994 Tribal Self-Governance Act expanded tribal rights to manage federal programs on reservations, including one key provision that provides tribal authority over DOI off-reservation programs that have special geographic, historical, or cultural significance to a tribe, making DOI program funding available for transfer to tribes (Kenney, 2012). However, this transfer of power is under the discretion of the DOI program, and has rarely occurred in practice.

It was not until 2000 that the federal government formally acknowledged the “special relationship” with Native American tribes (Kenney, 2012). On Nov. 6, 2000, President Clinton then issued EO 13175 “Consultation and Coordination with Indian Tribal Governments” (Clinton, 2000), which required all federal agencies to consult with tribes whenever considering policies that have tribal implications and to use maximum agency discretion and waivers in response to tribal concerns (Kenney, 2012). Though this mandated consultation procedures across the federal government, it was not until 2009 that President Obama continued the executive branch’s efforts to reach out to Indian country, convening a White House Tribal Nation Conference in 2009. He then issued an Executive Memorandum [EM] on tribal

consultation to federal agency directors (Obama, 2009) requiring each to submit an implementation plan for EO 13175, in which he recognized, “History has shown that failure to include the voices of tribal officials in formulating policy affecting their communities has all too often led to undesirable and, at times, devastating and tragic results” (Obama, 2009).

SOVEREIGNTY IN A MODERN CONTEXT

Today, Tribal Self-Determination policy dominates the U.S. government’s federal approach with Native American tribes (Kenney, 2012), Many have expressed concerns in establishing co-management agreements with Native American tribes, including the risk of delegating too much executive power to a third party, and creating a culture of sovereign immunity, as well as risks for tribes in the legal interpretation of such co-management agreements used to undermine tribal sovereignty (Kenney, 2012).

‘Sovereign’ is a label, a governmentalized identity that tribes never sought, nor a right that has ever been fully granted. Since the treaties were signed, tribes have existed in a state of exception, never granted full sovereignty or self-determination, but never given clearly defined legal status as assimilated U.S. citizens. They have existed in a state of in-between – in the absence of an appropriate legal framework in which to consider the political issues and dynamics at hand, Native peoples appear as a gap within U.S. legal discourse (Rifkin, 2009). The impact of this identity crisis has had profound effects on tribal wellbeing, and tribal relations. Though tribes have never lost the pride in their subjective identities, they have never obtained a U.S. legal status that reflects their desire and right for self-governance. Mark Rifkin quotes from the 1886 *U.S. v. Kagama* court decision regarding the legal definition of Native American tribes:

“They were, and always have been, regarded...not as States, not as nations, not as possessed of the full attributes of sovereignty, but as a separate people, with the power of regulating their internal and social relations, and thus far not brought under the laws of the Union or of the State whose limits they reside.” (2009)

Instead, tribes have been kept in this state of exception, suppressed in a marginal space.

“Typifying ‘the relations of the Indians to the United States’ as ‘peculiar’ and ‘anomalous,’ while also consistently presenting Native peoples as unlike all other political entities in U.S. law and policy, indexes the failure of U.S. discourses to encompass them while speaking as if they were incorporated via their incommensurability” (Rifkin, 2009). The ruling state is then given power to dictate tribes’ subjugated sovereign status, which functions in the decision less as a way of designing a specific set of powers than as a negative presence, as what Native peoples categorically lack, or at the least only have in some radically diminished fashion managed by the United States (Rifkin, 2009).

The gradual progress toward improved sovereign status perhaps requires an identity shift in how we define a sovereign. For now, “sovereignty functions as a placeholder that has no determinate content...the state of exception produced through Indian policy creates a monopoly on the legitimate exercises of legitimacy” (Rifkin, 2009 p. 91). And participation in management processes requires an acceptance of this undefined sovereign status, imposed through violence centuries ago:

“Tribes face a cultural dilemma. On the one hand, tribes are forced to represent themselves within the current structures in a way that is recognizable to non-Indians. For example, in order to have tribal health and wellbeing protected... they must be translated and reduced so that they can form an ‘input’ into the current system...it behooves tribes to present their programs so as to resemble state and federal programs. On the other hand, tribes must maintain and prove their distinct cultures, or risk challenges to their authority to self-govern.” (Ranco, 2011, p. 225)

FEDERAL CONSULTATION PROCESSES/REQUIREMENTS

Many laws and statutes have mandated formal engagement processes with Native American tribes to protect tribal treaty rights, uphold the trust responsibilities, and facilitate agency coordination with tribes. Through the vacillations between calls for treaty rights, followed by assimilation, legislation has been passed with efforts to both protect treaties and create frameworks for collaboration (Donoghue et al., 2010). Treaty law has been integrated into the federal agencies across all sectors of government; however, its implementation is varied, lacking consistency in standardized practices or enforcement. Treatment of treaty rights, sovereignty, and consultation requirements also vary across the three branches of government. While Congress has taken strides to promote self-governance and economic development since the early 1970's, the Supreme Court has taken virtually every opportunity in recent years to undercut the legal and practical basis of reservation self-government (Haskew, 2000).

An optimistic view of consultation practices acknowledges the government's efforts in recognizing the wisdom of Native Americans, and incorporating those views and interests in federal planning (Haskew, 2000). President Clinton's Memorandum issued after his 1994 Executive Order on enhancing the intergovernmental partnership included the following passage, though there is no record that the policy was developed in consultation with Native American tribes, but rather presented at the summit of tribal leaders:

“Each executive department and agency shall consult, to the greatest extent practicable, and to the extent permitted by law, with tribal governments prior to taking actions that affect federally recognized tribal governments. All such consultations are to be open and candid so that all interested parties may evaluate for themselves the potential impacts of relevant proposals.” (Clinton, 1994)

Others criticize these efforts as purely procedural, with little efficacy, in an attempt to merely placate federal requirements. “The proliferation of tribal consultation requirements in federal statutes and polices is arguably a laudable first step toward a mature understanding by the federal government of the sovereignty of Native American tribes...However, “consultation” remains an ill-defined term in the context of recent (fashionable) use by Congress, the President, and other federal policymakers (Haskew, 2000, p. 21-23). In dealing with consultation requirements, it is important to understand which authority promulgates the rules. The term “consultation” has two different interpretations. The first is those procedures required of federal agencies by statute or regulation. The failure to comply with these requirements can result in legal action by the entity whose consultation was neglected in order to ensure compliance. The second interpretation of consultation is those procedures promulgated by executive agencies – independent of statutory mandate. “One obvious result is that the meaning of consultation, and the institutional wisdom that supports that meaning, varies between each branch of the DOI, and varies for each federal agency depending on the source of the requirement” (Haskew, 2000, p. 26). Consultation requirements vest tribes with uncertain benefits and create an unsettled set of responsibilities for federal stewards” (Haskew, 2000, p. 22). While its purpose is to involve Native Americans in policy decisions that impact them, consultation requirements do not create a binding commitment for the federal government, often confusing participation with consent, when consent is never *really* asked for, nor heeded (Haskew, 2000).

In practice, the consultation requirement is left undefined, and unregulated. Many agencies have developed memoranda uniquely defining this process, but these requirements get weakened, with no means of enforcement, as jurisdiction devolves down to states and local governments. Table 2 lists the major U.S. Indian laws and policies.

Table 2: Major U.S. Indian Laws and Policies

Policy/Order/Law	Year	Description
National Historic Preservation Act (NHPA (16 U.S.C. 470 et seq.)(36 CFR Part 800))	1966	Under section 106 of the NHPA, a federal agency shall consult with any Indian tribe that attaches religious or cultural significance to properties eligible for inclusion on the National Register. Consultation is required on a government-to-government basis throughout the historic preservation review process. This consultation must be in a manner that respects tribal sovereignty and acknowledges the expertise of Indian tribes in determining properties of historic or cultural significance.
Indian Self Determination and Education Assistance Act	1970	Permits federally recognized tribes to plan, conduct, and administer programs and services previously managed by the federal government, subject to conditions and consultation practices, commonly referred to as a “638 contract.”
National Environmental Policy Act (NEPA) Implementing Regulations (40 CFR Part 1500)	1970	Requires the preparation of an environmental assessment (EA) or EIS for any proposed federal action that may affect the quality of the human environment. The Council on Environmental Quality (CEQ) regulations for NEPA requires agencies to contact Indian tribes and provide them opportunities to participate at various stages of an EA or EIS. CEQ has also issued a memorandum for tribal leaders encouraging tribes to participate as cooperating agencies with federal agencies in NEPA reviews. Section 40 further requires federal agencies to consult with Indian tribes early and throughout implementation of the NEPA process.
Archeological Resources Protection Act (16 U.S.C. 470 aa-mm)	1979	Requires federal agencies to consult with tribal authorities before permitting archeological excavations on tribal lands, and mandates the confidentiality of information concerning the nature and location of archeological resources.
Native American Graves Protection and Repatriation Act (NAGPRA)	1990	(25 U.S.C. 3001, et seq.)(43 CFR 10) – Requires consultations with Indian tribes, traditional religious leaders and lineal descendants of Native Americans regarding the treatment and disposition of specific kinds of human remains, funerary objects, sacred objects and other items.
Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations	Feb. 11, 1994	Section 6-606, “Native American Programs,” states that all responsibilities set forth in this order apply equally to Native American programs, and requires that the DOI, after consultation with tribal leaders, shall coordinate steps to address federally recognized Indian Tribes.
American Indian Religious Freedom Act (16 U.S.C. 1996)	1996	Establishes a policy to “protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, including but not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites”

Executive Order 13175: Consultation and Coordination with Indian Tribal Governments	Nov. 6, 2000	Charges executive departments and agencies with engaging in regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, and are responsible for strengthening the government-to-government relationship between the United States and Indian tribes.
Violence Against Women and Department of Justice Reauthorization Act, Title IX (Safety for Indian Women)	2005	Requires annual consultation between the Attorney General and Secretary of Health and Human Services and tribal governments concerning federal administration of tribal funds and programs, enhancing the safety of Indian women from domestic violence and sexual assault, and strengthening the federal response to such violent crimes.
Executive Memorandum on Tribal Consultation	2009	Directs agency heads to submit to the Office of Management and Budget a detailed plan of action and annual progress reports to implement the policies and directives of EO 13175.

In response to President Clinton’s EO 13175, federal agencies drafted reports identifying Native American issues relevant to the work of that department (Carter, 2011). Specific consultation requirements for actions impacting Native American tribes came much later. “Presently, federal land management agencies must consult with tribes where: tribal rights are reserved by treaty, spiritual and cultural values and practices exist, public lands are adjacent to tribal or trust lands, and tribal water rights may be affected” (Donoghue et al., 2010, p. 24). Under Clinton, many new pieces of legislation were passed protecting treaty rights and mandating frameworks for consultation and cooperation, including: EO 13007, the National Indian Forest Resources Management Act of 1990, Tribal Forest Land Protection Act (TFPA) of 2005. This period also saw congressional laws passed to expand tribal authority to exercise delegated federal Environmental Protection Agency (EPA) authority in Indian Country, enabling tribes to receive “treatment as a state” (TAS) status under many federal environmental laws, including the Clean Water Act, Clean Air Act, and others (Kenney, 2012). The 1994 TFPA authorizes the DOI to contract with tribes to restore federal lands that borders on or is adjacent to

Indian forest land or rangeland that presents or involves a feature or circumstance unique to that Indian tribe (including treaty rights, biological, historical, or cultural significance) (Kenney, 2012).

The following legal authorities require federal consultation procedures, though consultation requirements are not limited to only the laws and policies listed here (WH-IAEWG, 2009):

DEPARTMENT OF THE INTERIOR CONSULTATION GUIDELINES

In response to Clinton's 1994 memo, Secretary of the Interior (SOI) Bruce Babbitt issued Secretarial Order 3175, "Departmental Responsibilities for Indian Trust Resources," requiring DOI offices to prepare policy guidelines pursuant to the following consultation clause:

Bureaus and offices [of the DOI] are required to consult with the recognized tribal governments with jurisdiction over the trust property that the proposal may affect, the appropriate office of the [BIA] and the Office of the Solicitor (for legal assistance) if their evaluation reveals any impacts on Indian trust resources (USDOI, 1993).

In total, three Secretarial Orders outline the consultation requirements of the DOI bureaus and offices:

Department of the Interior Secretarial Order 3175: Departmental Responsibilities for Indian Trust Resources (1994) – required DOI offices to prepare policy guidelines pursuant to consultation clauses, in response to EO 13175 (Babbitt, 1994).

Department of Interior Secretarial Order 3206: American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (1997) – Provides guidance about federal-tribal relationship and implementation of the Endangered Species Act, requiring consultation with tribal governments in situations where federal actions impact Indian tribes and facilitate a government-to-government relationship for the coordination of natural resource management plans (Babbitt, 1997).

Department of the Interior Secretarial Order 3317: DOI Policy on Consultation with Indian Tribes (2011) – Updated and expanded clarification on the DOI's consultation policies with Indian tribes in compliance with EO 13175 after convening a working group

comprised of tribal leaders and DOI leadership, to recommend new approaches to consultation, including the designation of DOI Tribal Governance Officers, and Tribal Liaison Officers at all DOI bureaus (Salazar, 2011).

The DOI has required its agencies to develop these policies, which only reach as far as internal management guidance. The DOI Consultation Policies outlined procedures for initiating, executing, and responding to requests for consultation, the process from consultation to action proposal to implementation, and the roles of staff persons by which these actions would take place (USDOJ, 2011)

NATIONAL PARK SERVICE CONSULTATION POLICIES

In response to EO 13175, the NPS developed mutually acceptable consultation protocols to guide government-to-government relationships (USDOJ/NPS, 2006). The NPS's Organic Act forbids the infringement or impairment of park resources and values by the American people. In the case of sacred or historically important Native American sites within national parks, the NPS must allow continued use of ethnographic resources. The Service will collaborate with affected groups to prepare mutually agreed upon strategies for providing access to sites for groups with a long-standing connection and identity with a particular park or resource (USDOJ/NPS, 2006).

The authority granted to the NPS and outlined in the Organic Act includes provisions that define the consultation practices required to honor its legal responsibilities to American Indian Tribes as required by the Constitution, and treaties. It is not uncommon that Tribes have sacred sites or important hunting and gathering areas located within national park boundaries. As such, the NPS has included management policies that seek to mediate these relationships and mitigate any conflicts over the use of such areas. "The [NPS] will pursue an open, collaborative relationship with American Indian tribes to help tribes maintain their cultural and spiritual

practices and enhance the Park Service's understanding of the history and significance of sites and resources in the parks" (USDOI/NPS, 2006, p. 19). The MOU developed between the ONP and the eight Olympic Peninsula tribes facilitates a means by which, "NPS managers will be open and candid with tribal governments during consultations so that the affected tribes may fully evaluate the potential impact of the proposal and the Service may fully consider tribal views in its decision-making processes" (USDOI/NPS, 2006, p. 19). The NPS' states a commitment to meaningful exchange of information and ideas by seeking and reaching out to those who have an interest in the parks to:

- 1) Enhance the public's understanding of park resources and values and the policies and plans that affect them
- 2) Enhance the NPS' ability to plan and manage the parks by learning from others (USDOI/NPS, 2006).

These consultations can be formalized, as required under various laws, such as the National Graves Protection and Repatriation Act, or informal, as in the case of MOUs relating to specific programs or projects. In particular, the NPS outlines that traditionally associated people should be consulted about:

- Proposed research and stewardship of cultural and natural resources with ethnographic meaning for the groups;
- Development of park planning and interpretive documents that may affect resources traditionally associated with the groups;
- Proposed research that entails collaborative study of the groups;
- Identification, treatment, use, and determination of affiliation of objects subject to the NAGPRA;
- Repatriation of Native American cultural items or human remains based on request by affiliated groups in accordance with the NAGPRA;
- Planned excavations and proposed responses to inadvertent discoveries of cultural resources that may be culturally affiliated with the groups;
- Other proposed NPS actions that may affect the treatment of, use of, and access to cultural and natural resources with known or potential cultural meaning for the groups;
- Designations of National Register, National Historic Landmark, and World Heritage Sites with known or potential cultural meaning for the groups (NPS. 2006).

Federally recognized tribes are consulted on a government-to-government basis, which generally begins with an official notification about proposed actions to tribal authorities, and subsequent consultations with tribally appointed representatives whenever proposed actions may affect tribal interests, practices, and traditional resources (USDOI/NPS, 2006).

MEMORANDA OF UNDERSTANDING

In many cases, federal agencies are pursuing negotiated co-management arrangements with tribes via the authority under their original laws. Often, these relationships are defined in memoranda of understanding (MOU), which allow for flexibility through direct government-to-government contracting under the authority of the federal resource management laws (Kenney, 2012). These agreements recognize the special relationship between the federal government and Native American tribes and:

1. Expressly acknowledge the value of tribal natural resources knowledge, capacities, and expertise
2. Result from and recite a long-term positive working relationship
3. Do not impose treaty or aboriginal use boundaries on the lands where tribal management expertise may be used
4. Reflect an exchange of resources between tribes and the federal government (Kenney, 2012, p. 4).

TRIBES AND THE STATES

After numerous court rulings at the highest level in the nation, there remains widespread disparity and confusion regarding the sovereignty status of Native American tribes. Some federal policies have granted tribes “treatment as a state status,” while other federal programs have been handed over entirely to tribes through the “638 process.” “In *Native American Church v. Navajo Tribal Council* [272 F. 2d 131(1959)](1959), a federal district court stated that, ‘Indian tribes are

not states. They have a status higher than that of states.’ Notwithstanding this statement, states have often acted as if they were the political superiors of tribal nations” (Wilkins, 2002). Such assertions of state jurisdiction in Indian country, absent tribal and federal consent, are problematic, however, because they violate the doctrine of inherent tribal sovereignty, run afoul of the treaty relationship between federally recognized tribes and the federal government, damage the federally recognized trust doctrine, and breach the doctrine of federal supremacy in the field of Indian affairs outlined expressly in the commerce clause of the United States Constitution (Wilkins, 2002, p. 1).

Western states, including the state of Washington, were required to include Indian disclaimer clauses in their territorial acts and constitutions that explicitly declare that the states are forbidden from extending their authority inside Indian country. Barring congressional invitation, an amendment of state statutes and constitutions, and a modification of treaties, states have no constitutional authority inside Indian country. The Washington Territorial Act of 1863 (after the period when treaties were made with area tribes) states the following disclaimer:

Nothing in this act shall be construed to impair the rights of person or property now pertaining to the Indians in said Territory, so long as such rights shall remain unextinguished by treaty between the United States and such Indians. (Wilkins, 2002)

And when the territory became Washington State in 1889, the following language was included in the enabling act:

“The People and the State forever disclaim all rights to Indian lands; those lands remain under absolute federal jurisdiction. State may only tax land of individual Indians who have severed tribal relations but not if that land was granted by the Congress with an express tax exemption.” (Wilkins, 2002)

States are not in an easy situation, having to accept the federal government’s vacillating Indian policies over the years and deal with the failure of the U.S. government’s assimilation

attempts that led to oppression and destitution of many tribal communities. Many tribal members were encouraged to leave the reservation, and ended up with nowhere to turn having migrated to urban centers, and thus became dependent on state services. The federal government has maintained its sovereignty over tribes, as well as the states with respect to the tribes, but also acknowledges the sovereignty of the tribes through treaties and the trust relationship, and has historically wavered back in forth in supporting states or tribes in tribal-state conflicts (Wilkins, 2002). Some tribes and host states have worked out sovereignty accords or agreements in which both parties agree to respect the sovereignty of the other, which serves to augment tribal sovereignty and improved tribal-state relationships, as intergovernmental relationship are difficult to navigate due to the pre-constitutional and extra-constitutional status of tribal nations whose members are permitted the rights as citizens of all three jurisdictions (Wilkins, 2002). Washington State's tribal arrangements are discussed in a later section.

Currently, more than 300 federally recognized American Indian tribes in the lower 48 states exercise government powers that increasingly put them in positions of conflict and cooperation with state governments, adding an additional level to the study of federal-state power relationships in the U.S. (Mason, 2002). However, the history of tribal-state relationships has been riddled with conflict more than partnership. One of the major sources of conflict in these relationships is constitutional ambiguity, such that nothing the U.S. Constitution delineates the scope and reach of tribal-state intergovernmental affairs (Mason, 2002). Over the years since the founding documents and treaties, the U.S. Congress has been deferred extensive powers from the Supreme Court, and allowed to erode tribal sovereignty while expanding state powers in Indian country. A particular site of such expansion is on the borders of reservations, where common resources may transcend these jurisdictional boundaries, requiring regulatory oversight

agreements and resource ownership conflicts. For states, Indian control of resources is viewed as a zero sum game, where tribal control and profits means a loss of state control and tax revenue (Mason, 2002). In the 1980's and '90's, three members of Congress led what was perceived as an attack on tribal sovereignty, including Representatives Bill Archer (R-TX) and Ernest Istook (R-OK), and Senator Slade Gorton (R-WA). [Gorton's attempts at thwarting the Elwha River dam removals are discussed later. He not only focused on reducing tribal sovereignty locally, but helped lead an effort to change fundamental aspects of tribal sovereignty nationwide, as well as the federal government-to-government relationship between tribes and the U.S. government (Mason, 2002)].

The trend to strengthen state authority, and devolve governance further to local levels is not at odds with tribal sovereignty, and in fact, will serve to strengthen tribal-state relationships. "What remains to be seen is whether the historic tribal-state conflict can be alleviated and replaced by a new era of trust and cooperation" (Mason, 2002, p. 96). Chickasaw Nation Governor Bill Anoatubby has described the form that tribal-state negotiations should take:

"Each government which is a party to intergovernmental agreements must "get" something from such agreements, and each government must be willing to "give" something in return. By the very nature of the aspects of sovereignty attributed to both the tribes and the states, each must be willing to bargain with the other for an end results that is fair and adequate to meet the needs of both." (Anoatubby, B. 1992, as cited by Mason, 2002, p. 97)

COLLABORATIVE ENVIRONMENTAL MANAGEMENT

Collaboration has become a popular idea among government and non-governmental organizations as a means to improve management solutions through decentralization and stakeholder involvement. "In recent decades, the control of common property resources by

centralized government structures has generated much conflict... as a result, few communities remain beyond the reach of state structures for resource control and are still able to govern local resources” (Ostrom, 1990). Collaborative management provides a means through which communities can be reinserted into the resource management arena, with positive outcomes toward community ownership and empowerment. However it’s outcomes are widely debated,

“Viewed collectively, these closely related social experiments in decentralized participatory management constitute a fundamental redesign of conventional institutions linking resource managers and resource-dependent local communities” (Spaeder and Feit, 2005). The principles of collaborative management are discussed below, however a more focused discussion of its processes with, and impacts on, indigenous communities follows in later sections.

Collaborative management is difficult to both describe and define in concrete terms. Oftentimes, the processes themselves evolve to describe the coordinated effort. That is to say, there is no one road map for collaboration. It is unique to place-based characteristics and boundaries, social norms and relationships, and local governance structures. In Mettesich’s et al. (2001) handbook, *Collaboration: What Makes it Work*, collaboration is defined as:

“A mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing or resources and rewards.” (p. 59).

This definition is made further confusing by the list of like-terms used in the literature and in day-to-day language to describe similar management relationships and their processes, such as cooperation, coordination, partnerships, co-management, contractual partnerships, community-based management, and others. These processes can take many different forms, and have varying legal mandates for desired outcomes, as shown in Table 3.

Table 3: Types and labels for Collaborative Management

Type	Definition	Source
Collaborative Management	A mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals; includes a commitment to mutual relationship; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources	Mattessich et al. (2001)
Cooperative Management	Informal relationships that exist without any commonly defined mission, structure, or planning effort. Information is shared as needed, and authority is retained by each organization so there is virtually no risk. Resources are separate as are rewards (M); a shared, although not equal, decision-making authority and the ability of individual stakeholders to make decisions pertaining specifically to them (D)	Mattessich et al. (2001), Donaghue (2010)
Co-Management	Joint decision-making authority; Each entity retains veto power over proposed decisions; Considerable autonomy granted for certain parties to conduct specific activities, with joint agreement; Transfer of funds; High level of dependency; High level of information and knowledge transfer; Joint implementation of work on-the-ground	Donaghue (2010), and others
Contractual Partnership	Government agency retains decision-making authority; Transfer of funds; Varied level of dependence; transfer of knowledge; Project implementation by tribe	Donaghue (2010)
Coordinated Management	Characterized by formal relationships and an understanding of compatible missions; some planning and division of roles is required; authority still rests with individual organizations (M). When independent units take some actions to synchronize their work; a more interactive process that seeks to achieve joint goals through joint activity (C-S&K)	Mattessich et al. (2001), Cicin-Sain and Knecht (1998)
Partnership	A type of permanent or regular coordination, characterized by a formal arrangement	Kuska (2007)
Community-Based Management	Groups of diverse stakeholders who convene voluntarily to work on natural resource policy, planning, or management issues specific to a particular location	Wagner & Fernandez-Gimenez (2008)
Working relationship	Decisions are made independently; No transfer of funds; Partners highly dependent on each other and recognize the mutual benefits of collaborating; No binding agreement, stakeholders involved because of benefits from pooling their resources: Transfer of knowledge; On-the-ground work implemented independently but with coordination	Donaghue (2010)
Harmonization	A further intensification of collaboration, defined by synchronized work, guided by a set of explicit policy goals and directions, generally set at a higher level	Cicin-Sain and Knecht (1998)
Communication	Forum or mechanism exists for periodic communication/ meetings among independent units	Cicin-Sain and Knecht (1998)
Integration	Formal mechanisms exist to synchronize the work of various units who lose at least part of their independence as they must respond to explicit policy goals and directions - this often involves institutional reorganization	Cicin-Sain and Knecht (1998)

Why Collaborate?

The need for collaborative management is rooted in criticism of authoritarian, autonomous solutions to complex societal problems that instead require multi-organizational solutions (Mattessich et al., 2001). “Many community leaders and residents have hoped that collaboration will not only accomplish tasks that will improve community conditions, but also that collaboration will reinforce social fibers and increase the communities’ capacity to get even more done” (Mattessich et al., 2001, p. 2). In a positive feedback loop, good collaboration breeds more and better collaboration. However, collaboration is not always effective, or appropriate, and certainly not easy. It may cost more and take longer, but its ambitious goal is to create lasting, comprehensive, and sustainable solutions to complex problems that no single agency or organization could possibly fix alone, or has spent costly years failing to do so.

Borrini-Feyerabend et al. (2007), offer the following reasons behind why collaborative relationships form:

- Collaborations are a form of self defense
- Collaborations are a response to complexity
- Collaboration for effectiveness and efficiency
- Collaboration for respect and equity
- Collaboration through negotiation
- Collaboration as social institution

And Weiss (1987) offers a slightly more cut and dry list of reasons to collaborate:

- Financial benefit
- Shared professional values
- Political advantage
- Problem solving
- Reduction of uncertainty
- Legal mandates

But to be successful, all of these incentives must outweigh the disincentives, i.e. the cost of collaboration. Weiss (1987) explains that collaboration is costly and unlikely to occur on its own, therefore any benefits must be achieved by sharing the costs among the participants. Those costs

include the loss of power and autonomy for historically top-down regulators, laborious logistical hurdles in coordinating schedules resulting in management inefficiencies, discordance of organizational missions, and competing constituent group concerns.

With all of the challenges that collaborative management presents, there must be an overpowering beneficial outcome to encourage continued cooperation and participant buy in. The lists above include reasons to initiate collaboration, but the production of increased social capital through collaborative processes is a powerful, though fragile, positive outcome that has inherent value to participants, and can be utilized later. Wagner and Fernandez-Gimenez (2008) define social capital as “relationships of trust, norms of reciprocity and networks among individuals that can be drawn upon for individual or collective benefit... It is an important asset, that can be called on in a crisis, enjoyed for its own sake, and leverage for material gain” (p. 324). They found that social capital develops out of respect and equal consideration, as well as commitment and continuity, empathy, transparency, and dependability (Wagner and Fernandez-Gimenez, 2008).

The environmental characteristics of a collaborative management case, its context, can play an influential role in how the issue at the heart of the conflict gets defined. “Issue definition refers to the biophysical scale and the way that a particular problem is framed. Together, these two elements of issue definition provide a rationale for action and a foundation on which collaboration initiatives are built” (Koontz et al., 2004, p. 148). The timing and support behind the way an issue is defined can also influence collaborative success. A natural event and its emotional response, contentious legal proceedings, or the threat of legal action, or inspired leadership can define an issue and create a policy window when the opportunity to address and receive it may provide the impetus to jump-start a collaborative effort. Kingdon (1995) explains

that policy windows open in either the problem itself, or in its political environment, creating a brief opportunity for a solution to be attached. This also presents an opportunity for the coupling of issues to take advantage of the open window, which can sometimes motivate and mobilize a solution, or bog down the problem with even more competing issues (Kingdon, 1995).

Collaboration does not form on its own. Often there are multiple factors and policy entrepreneurs contributing to the formation of collaborative relationships (Kingdon, 1995), and frequently, an evolution takes place as participants explore the perceived benefits and hurdles in forging such a partnership. The participants develop attributes to support their interaction, such as shared goals and rules, or a mutually agreed upon decision-making process. Therefore, a collaborative partnership may take one form initially, and evolve over time as stakeholder relationships develop. The conceptual spectrum for the types of collaboration is illustrated in Gerhard Kuska’s (2005) work, combining theoretical frameworks and definitions from multiple sources (Figure 10).

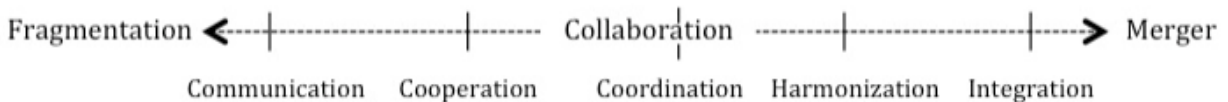


Figure 10: Continuum of collaboration (Kuska, 2005)

Who is a Stakeholder?

“Whether these efforts are called community-based environmental management, collaborative conservation, community-based initiatives, grassroots ecosystem management, participatory natural resource management, partnering, co-management, or ecosystem management, a common theme is collaboration among or between different stakeholder groups”

(Koontz et al., 2004. p. 19); this implies that the government shares decision-making power and authority with other stakeholders. Stakeholders are not uniform, and are often made up of groups with competing interests and perceptions of meaning for natural resources (Singleton, 2009). Though this umbrella term is generally accepted among managers for people who are impacted or affected by a particular program or project, it is not a term that is welcomed or accepted by all participants, particularly in the case of indigenous communities. Groups frequently disagree about resource uses and the causes of environmental problems, as well as who should be burdened with resource conservation (Singleton, 2009). One of the greatest challenges in collaborative natural resource management is identifying who should participate, and how groups should be involved. Different actors have varying rights to resources, whether founded in law, or property ownership, or historical entitlement based on social norms, it is difficult to determine who will be considered “a rightful decision maker, versus an associate, an advisor, or simply someone to be kept informed about the decisions of others (Borrini-Feyerabend et al. 2007, p. 64). There is little consideration for the differences in rights, and political capacities among stakeholder groups who are tacitly lumped together (Singleton, 2009). Collaborative processes seek to increase the equity administered by institutional arrangements among user groups; the inclusion of stakeholders is an important early step in this process. Borrini-Feyerabend et al. (2007) offer the following responses to the question, “What does striving for equity mean?:

- Helping the underprivileged to “develop their own entitlement”.
- Recognizing entitlements rooted in valid and legitimate grounds rather than entitlements rooted in the exercise of one or the other form of power.
- Promoting a fair negotiation of functions, benefits and responsibilities among entitled social actors (p. 55).

Collaboration Characteristics

Given the costs, however, it is important to understand what makes good collaboration, and what characteristics lead to failure. Mattessich et al. (2001) identify twenty success factors across many collaborative case studies, grouped into six categories (the most frequently cited factors are highlighted in **bold**):

1. Environment
 - a. History of collaboration or cooperation in the community
 - b. Collaborative group seen as legitimate leaders in the community
 - c. Favorable political and social climate
2. Membership characteristics
 - a. Mutual respect, understanding and trust**
 - b. Appropriate cross-section of members**
 - c. Members see collaboration as in their self-interest**
 - d. Ability to compromise
3. Process and Structure
 - a. Members share a stake in both process and outcome
 - b. Multiple layers of participation**
 - c. Flexibility
 - d. Development of clear rules and policy guidelines**
 - e. Adaptability
 - f. Appropriate pace of development
4. Communication
 - a. Open and frequent communication**
 - b. Established informal relationship and communication links
5. Purpose
 - a. Concrete, attainable goals and objectives
 - b. Shared vision**
 - c. Unique purpose
6. Resources
 - a. Sufficient funds, staff, materials, and time**
 - b. Skilled leadership

Although intended to be a guide for collaborative efforts, these characteristics can be identified in collaborative management case studies and used to evaluate the success or failure of those efforts, and which were most important to that end. It has been shown that collaborative endeavors can successfully achieve intended management goals, however, it is questioned whether each of these characteristics are necessarily all of the time, and to their fullest extent (Koontz et al.,

2004). The variability of environmental management cases requires a more nuanced and specific collaborative structure unique to each case.

Government's Role in Collaborative Environmental Management

The role of government in collaborative management efforts can take multiple forms, but is often as more than just a stakeholder. The influence of government at all levels throughout the collaborative relationship formation and processes can determine outcomes more than any other participant. These group structure dynamics are important to understand and facilitate in order to keep the group functioning and communicating effectively. “Although it is clear that collaborative approaches afford new opportunities for involvement, governmental institutions still define how the participatory process will unfold and the extent to which power and influence

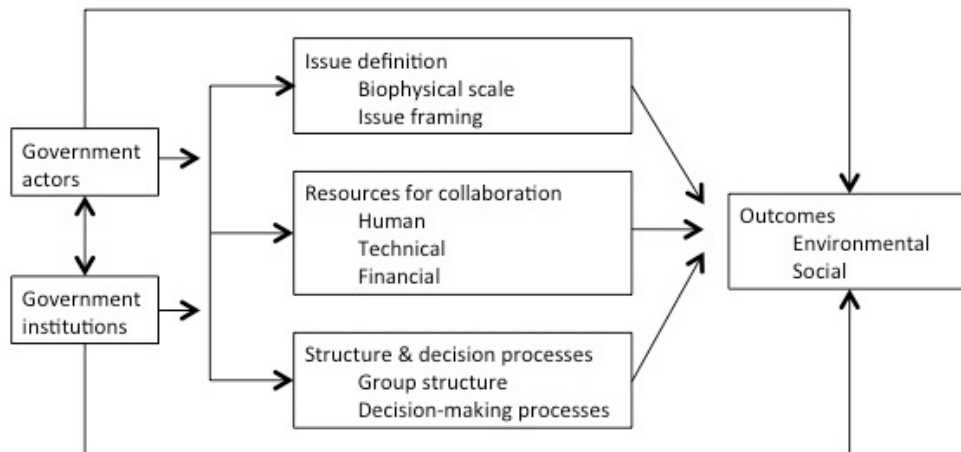


Figure 11: Framework for analyzing governmental impacts on collaborative environmental management (Koontz et al., 2004)

are shared” (Koontz et al., 2004). Figure 11, from Koontz et al. (2004), illustrates how governmental actors influence collaborative processes.

Government actors and government institutions however, do not always agree on the issues or their solutions. Collaborative processes might put one agency against another, or against the institutional authority, whether it is a jurisdictional boundary, or standards by which

an action is implemented. The problem definition, and the unity of the group participants around that definition, can put a governmental actor at odds with the way the issue is framed by its institution. In the case of an institutional conflict over the issue definition, however, the strength of the collaborative group may outweigh the legally mandated institutional response, giving power to the collaborative group that may have never existed had the agency or non-governmental stakeholders tried to make the same effort alone.

The group structure amongst participants shapes interactions, and establishes a framework for coordinating activities (Koontz et al., 2004). Though often dictated by governmental participants, collaboration should provide equal, if not greater, opportunities for nongovernmental actors to participate and influence decision-making. The degree to which the government actor dictates the processes can both reflect and influence the power dynamics among the group. Before processes are established, group formation can set the foundation for how power is shared. Deciding who makes up the group, which stakeholders are represented, and which are left out, can immediately create an imbalance. Often, government institutions dictate the participatory processes its actors must follow. “In all government-led, or government-encouraged cases, institutions in the forms of agency processes, programs, and official guidelines established the rules for membership selection and determined the degree to which government actors could become involved in the collaboration” (Koontz et al., 2004, p. 152). These policies and procedures can constrain government actors’ participation, or create a perceived unwillingness to share in the management. The way in which the government actor delegates authority and actions can determine the success of the collaboration.

The value of resources, and how they are shared, can also affect this power balance. Who controls the funding, its distribution, and how contracts are awarded, can dictate which actor is

perceived to be the most influential. Likewise, the owner of information and their willingness to share it, and degree of openness to new information, can also affect group dynamics. Intentional space for local and traditional knowledge in collaborative processes can legitimize those stakeholders and improve the process' outcomes with the local community (Donoghue et al., 2010). The inclusion of traditional ecological knowledge (TEK) (Berkes, 1999; Donoghue et al., 2010; Kenney, 2012) discussed further in later sections.

EVOLUTION OF COLLABORATIVE ENVIRONMENTAL MANAGEMENT

The impetus for the transition away from top-down, command-and-control style environmental regulation has its roots in mid-20th century, prior to the nascent era of environmental policy, as we now know it. During the 1940's, government agencies began seeking out and incorporating public views in policy decisions; before that time, public involvement occurred on an ad hoc basis at each agency's discretion (Koontz et al., 2004). Congress passed the Administrative Procedures Act (APA) in 1946, in response to this concern after the formation of many New Deal bureaucracies. The APA provided for public notice of federal rulemaking, public comment periods during the rulemaking process, including public hearings, as well as public representation at trial-type hearings (Koontz et al., 2004).

Much of the theoretical foundation for this type of regulation is based in rational choice theory economics. Later, this dominating worldview was reinforced in a seminal article by Garret Hardin, in which he coined the phrase to explain uninhibited and inevitable resource consumption as "The Tragedy of the Commons" (1968). "Hardin proposes a conventional theory in which he contends that external institutions are required because actors would degrade common resources out of self-interest" (Plummer, 2004). Decades of empirical evidence have

since challenged Hardin's idea, focusing on the capacity of localized self-organized networks of resource users to self-regulate. Elinor Ostrom and many others argued, "Within social institutions, individual rationality is not a dominant strategy. All decisions are embedded in and influenced by a social context, and a greater breadth of rationale models is required in social relationships" (Plummer, 2004). The movement away from external regulatory forces, and toward the potential for community trust, social norms, and cultural values to sustainably manage natural resources has taken hold in recent decades. New decentralized institutions have developed as a result of the efforts made by state manager and local resources users to address an array of crises, conflicts, and dilemmas surrounding common property resources (Spaeder and Feit, 2005).

Though the process remains obscure to most citizens, the 1960's saw an increase in public participation that had never been seen before. That decade saw additional laws passed providing the inclusion and participation of the public in federal decision-making. "But, rarely was the participatory ideal of the public working hand in hand with agency bureaucrats realized during these early phases of citizen involvement" (Koontz et al., 2004). The seventies followed and a rising public concern about the environment galvanized Congress into action, making the 1970's the "environmental decade" (Vig and Kraft, 2013). The National Environmental Policy Act, and many others, created a venue where collaboration was required amongst regulatory agencies and stakeholders. Following in the footsteps of these initial laws, a flurry of environmental and natural resource statues were passed, with provisions for public participation (Koontz et al., 2004). Despite the increase in stakeholder participation, these new laws also carried teeth, "reflecting a conviction that the federal government must have sufficient authority

to compel polluters and resource users to adhere to demanding national standards and decision-making procedures that ensure responsible use of natural resources (Vig and Kraft, 2013).

By the end of the “environmental decade” however, a backlash was developing over concerns of overly burdensome regulation and its impact on the economy (Vig and Kraft, 2013), as well as the hurdles to effective and efficient service provision (Koontz et al., 2004). The Reagan Presidency responded to pressures for devolution of federal authority and brought a re-evaluation of environmental laws. Seeking to reduce the size and reach of government, responsibility was increasingly shifted to the states (Vig and Kraft, 2013). The defunding and subsequent re-emphases on environmental laws in the U.S. have swung back and forth with the pendulum of public sentiment and Presidential ideologies over the years. Since the 1990’s, “governments at all levels have struggled to redesign environmental policy for the twentieth century; Presidents G.W. Bush and Clinton tried to re-invent environmental regulation through the use of collaborative decision-making involving multiple stakeholders, public-private partnerships, market based incentives, information disclosure, and enhanced flexibility in rulemaking and enforcement” (Vig and Kraft, 2013, p. 3). “The consequence of public participation legislation combined with devolution, decentralization, and privatization in the United States has been increased emphasis on collaborative approaches to policy and public management” (Koontz et al., 2004). This era saw a growth in grassroots concern over the environment, demanding a new approach from agencies for alternative decision-making processes and greater stakeholder involvement, “under these types of arrangements, *government*, as a formal institution of the state, ceases to hold sole power through command-and-control mechanisms, thereby shifting to *governance*, a process that takes place through the collective action of a variety of participants” (Koontz et al., 2004).

OUTCOMES OF COLLABORATIVE ENVIRONMENTAL MANAGEMENT

Despite its challenges, collaborative environmental management has taken hold across governmental scales “as a means to transcend political boundaries, manage environmental conflicts, and address complex problems that have not been solved by traditional means” (Koontz et al., 2004). Going beyond the goal of regulation and enforcement policies, collaborative management attempts to build trust amongst and between communities, it “promise[s] to transform participants’ views of their adversaries and of their own interest... discovered shared values and come to trust and respect one another, ... to understand that their well-being is intimately tied to that of the community” (Layzer, 2008, p. 26). The bottom line, however, may not be the impact collaborative processes have on resource user communities, but its effectiveness and efficiency, as a management process and at achieving its environmental objectives. Successful examples have demonstrated that collaborative solutions are more effective at solving environmental problems because they incorporate local knowledge, provide a sense of ownership and legitimacy, easing implementation and resulting in more locally relevant policies that are harder to overturn (Layzer, 2008).

Environmental Outcomes

“In the environmental arena, the process of collaboration is important, but achieving outcomes is essential” (Koontz et al., 2004, p. 156). Many believe that collaborative management ensures a locally specific approach, best suited to find a long-lasting solution, while others admit that in the absence of measurable impacts, the social outcomes associated with the process of stakeholder involvement are just as important. In the case of collaborative environmental management, the environmental quality impacts are particularly difficult to measure. However,

good environmental solutions stem from good plans, and “it is apparent that collaborative activities can produce environmental management tools and promote environmental change” (Koontz et al., 2004, p. 158). Koontz and Thomas (2006) argue, however, that the success of collaborative environmental management should be primarily measured in terms of environmental outcomes. The challenges faced in linking processes to environmental outcomes include gathering sufficient data to measure the environmental outcomes, allowing sufficient time to measure long term impacts since implementation, and isolating the variables that induce environmental change (Koontz and Thomas, 2006). These hurdles to declaring the success of collaborative environmental efforts reflect an inherent view that in the realm of environmental management, collaborative processes are not the end goal, but rather the means to attain improved environmental quality. Therefore, we must be able to link collaborative processes to improved environmental outcomes in order to justify its use as a management mechanism, especially considering the social and financial cost associated with its prolonged and challenging process.

Social Outcomes

The social outcomes of collaborative environmental management have been far more studied and measured than their environmental counterparts. Analyses of collaborative processes are becoming quite diverse as a variety of approaches have been adopted, and a complex mix of differing, and sometimes conflicting, research findings are emerging (Spaeder and Feit, 2005).

Many of the outcomes of collaboration have consistently emerged across a multitude of case studies, included the building of trust, increased social capital, knowledge and understanding of fellow participants, promotion of participatory democracy, network ties, and enhanced communication (Koontz et al., 2004); some communities have embraced participating

in these approaches, as an effective alternative to coercive, state-led regimes, in order to regain some local control over their resources, serving as a basis of resistance, and validating local resource management practices (Spaeder and Feit, 2005). The participation of government actors can have dramatic effects. By limiting its autonomy, collaborative processes can improve its perception amongst the public, reversing the stereotypical roles that characterize common public participatory processes, and interactions between government and non-governmental actors, which are often characterized by conflict, and distrust (Koontz et al., 2004).

Although collaborative approaches formed out of a need to address the problems and limitations of previous top-down policies, much debate has evolved around their ability to achieve efficient and effective management outcomes. “Some skeptics believe that collaboration actually exacerbates the power imbalance between environmental and development interests, and holds the potential for worse outcomes (Layzer, 2008, p. 30), especially if consensus decision-making leads to a “lowest common denominator” decision (Koontz et al., 2004), rather than innovative solutions. These concerns are based on the recognition that environmentalists and resource users rarely have the skills and experience, or funds, to participate effectively in collaborative processes, leaving more powerful and knowledgeable participants to dominate, and the opportunity for government policy-making to be co-opted by special interests, leaving out poor and minority stakeholders from the process (Koontz et al., 2004). “Because collaborative processes tend to deal with the most tractable- rather than the most serious- problems, the resulting plans are likely to be vague, deferring conflict later down the road, when implementation may only achieve the “low hanging fruit” instead of the more complicated issues that prompted the problem-solving effort in the first place” (Layzer, 2008).

The opportunity for the co-management of resources among like resource users is an opportunity to enable, empower, and provide license as an innovative response to challenges in practice and theoretical advancements (Plummer, 2004). These systems have their limits however. Not all attempts at collaboration achieve their lofty objectives. Instead, a state of governmentality is simply devolved to the community-level, not achieving the equity intended, nor any progress toward autonomy for community based resource management. Discussions of the efficacy of decentralized government are replete with discourses of enchantment or disenchantment with the possibilities of co-management (Spaeder and Feit, 2005). In her analysis of many alternative institutional arrangements, Pinkerton (1989) questioned whether the emergence of co-management defies an ever-increasing scope of bureaucracy in society, or if co-management is an incremental move in that direction. This question raises the concern of whether informal local authority systems of resource management can sustain their legitimacy while nested within larger, more dominant institutional processes (Kofinas, 2005).

CO-MANAGEMENT WITH INDIGENOUS PEOPLES

“The model of collaborative resource management involving government and indigenous community(ies) clearly identifies a domain where environmental imperative (the need for local solutions to natural resource management problems) and government commitment to indigenous peoples confront one another most starkly” (Tupa and Welch, 2006, p. 389). The devolution of command-and-control style environmental management and regulatory mechanisms to involve more community-based solutions and local involvement is very applicable to the management relationships between government and indigenous peoples. These relationships have evolved rapidly in the past two decades. Much of the research on co-management is focused on examples

since the 1990's, representing a worldwide shift largely resulting from the environmental justice movement, a shift away from command-and-control style regulation, and an international focus on indigenous and human rights.

The evolution of co-management arrangements between the U.S. government and Native American tribes has been riddled with contention and numerous legal battles. It involved a long fight for legally held rights described in original treaty documents from the 1800's, the modern interpretation of the federal trust obligation, forced collaboration through social uprising and threats of litigation, media stunts, and at times, violence. "The simplest definition of co-management is where the *co* means some form of dual arrangement between government and people; where ownership of a resource is vested in the state and use is by the people as of right but where neither party has overall responsibility for managing the resource" (Tupa and Welch, 2006, p. 378). In practice, these co-management relationships are highly varied in both structure and outcomes. American Indian laws and consultation requirements laid the foundation and legal obligation for co-management. However, those laws are not often successfully translated into practice. Co-management processes require flexibility and adaptation from the federal partners, it demands that the power imbalance be made more equitable, and it forces resource managers to sit face to face with their counterparts, and address pressing and specific environmental problems under the daunting context of a tragic and ugly history. These are enormous tasks. The legal mandates for these actions suggest the potential for enormous benefits, if performed successfully. "Despite legal and political challenges, tribal natural resource management remains a viable alternative worthy of consideration, and many new and collaborative approaches are developing across the nation" (Kenney, 2012, p. 4).

The following discussion explores the characteristics and outcomes of co-management, identifying positive and negative examples meant to represent the current stage of the progress in the U.S. toward an equitable relationship with Native Americans.

Impetus for Co-Management

One may argue that the U.S. government's intentions are not to achieve equity, but rather to appease the call for it - to establish processes that might enable an equitable outcome, but are impossible in reality, given the legal and societal conditions that makes the status of Native Americans in the United States so complex. The opportunity for co-management of environmental resources between governments and indigenous communities is a situation perhaps best poised to implement a truly collaborative and empowering management mechanism. This potential is especially evident in indigenous communities, where community structure and cultural values are strong components of the community structure and the need to live in balance with available resources has been understood and ingrained for generations (Anderson, 1996). Native communities hold strong heritage with the natural world, often having utilized a resource for tens of thousands of years in a single location. This familiarity and closeness with nature is interwoven into community structures, in lifestyle, spirituality, rules and laws, and more modernly, economics. If strong community ties, interdependence, and structures of rules and religion are associated with the wise use and management of natural resources, it presents ample opportunity to partner with government in a way that allows autonomy but achieves mutual goals toward resource management and conservation.

Co-management creates a dilemma for indigenous peoples, particularly in the U.S., who have been forced to accept the role of non-Indian settler states and their imposed environmental

standards, which have permitted the depletion and contamination of tribal resources, with grave consequences for tribal members' health and for tribes' exercise of their collective rights to their resources (Ranco et al. 2001). Although co-management provides an opportunity to participate in the management process, it is not the intention of indigenous peoples to accept the responsibility for a now depleted ecosystem (Ranco et al., 2001; Pena, 2005). Until recently, indigenous communities were removed from the resource sustainability debate through a combination of prejudice, marginalization, and conflicting knowledge systems (Tipa and Welch, 2006). Prior to the modern Self-Determination Era, federal policies centralized decision-making for tribal lands, timber and other resources in the BIA (Kenney, 2012). These disputes over ownership and access to management decision-making, as well as the utilization of natural resources have resulted in long standing grievances (Tipa and Welch, 2006). During the Self-Determination Era, and in the relatively short time since, tribes have been forced to rapidly expand their social capital and organization and technical capacity to take on resource management in a new modern government system. Likewise, tribes were calling on, and forced to work with, agency staff who were not provided the tools with which to meet these obligations, and who were fragmented across agencies with differing jurisdictions and responsibilities in system that was backwards to the holistic ecosystem understanding and integration of traditional indigenous resource management. "This involves some irony in that it is not uncommon for governments to argue that it is difficult to negotiate with indigenous communities because the latter do not speak with one voice" (Tipa and Welch, 2006, p. 378).

Co-management can act as a bridge between government based systems and local systems (Berkes, 1994), while, as conceptualized, co-management is at the nexus of bureaucracy based, community based, and market-based systems (Yandle, 2003). Central to these definitions

is the claim to commonly held natural resource property (Plummer, 2004). These claims serve as a basis in challenging the dominant property rights regimes, and also become the impetus into the spectrum of potential institutional arrangements (Plummer, 2004). Furthermore, many recognize that “co-management is not only about improving the management of resources, it is also about negotiating and redefining relationships between people with varying interests in, and varying degrees of authority over, the resource(s)” (Goetze, 2005, p. 247). Recently, it is gaining widespread acknowledgement that the inclusion of knowledge from all user groups and improved local-level practices, as well as the recognition that values and beliefs of indigenous communities must inform resource management to achieve sustainability (Tipa and Welch, 2006). The potential for sustainable solutions has served to combat some of the pessimism surrounding our inability to solve complex and vexing environmental problems.

Idealized *real* co-management scenarios are rarely the case. A continuum exists from limited consultation and government dominated co-management to autonomy in community dominated systems; each is founded on a system of duality, the governing state and the community. However, indigenous communities often do not see these dynamics similarly, and in fact, are marginalized by the limitations it presents (Tipa and Welch, 2006). Each model or structure within the comanagement continuum goes beyond the two dimensions of *government* and *community*, as Tipa and Welch (2006) explain. The diversity and complexity of these arrangements requires a more nuanced understanding, where “true comanagement,” as defined by Berkes (1994), is not always an available option, considering the levels of dependency and fragmentation of many indigenous communities in the modern world (p. 381). Removing consultative forms from the spectrum, the three meaningful types of co management to explore are cooperative, community-based, and collaborative management, “each of these formulations

expresses the way decision is delegated by central governments and suggest progressively greater levels of local-level decision-making” (Figure 12)(Tipa and Welch, 2006, p. 380).

Community-based management, as touted by leading scholars of sustainable environmental management and adaptive management (Ostrom, 1990; Pinkerton, 1989; Armitage, 2009), is highly diverse and site-specific, and requires unique definitions of common property and institutional regimes. But, community-based management is not necessarily the preferred form of co-management, as shown in Figure 12. This discord is explained by how one defines *community*. Common approaches may not achieve equitable representation of community stakeholders, as discussed earlier, and collaborative stakeholder processes often fail to facilitate the engagement of native people (Singleton, 2009). In the case of indigenous communities with legally founded treaty rights and moral imperatives for environmental justice, the definition of community, in terms of who participates in the management of its resources, becomes even more complex; legal institutions governing co-management authority, and related issues are often quite different from those governing other “stakeholders” (Singleton, 2009). Indigenous communities perceive themselves as separate from other community stakeholders. In Washington State, federal and state law supports this perspective. As legally defined co-managers of salmon and steelhead, tribes are treated as states, with equal status as state government in decision-making. The power associated with their co-manager status, though legally limited to the management of salmon harvest, and now salmon habitat protections, extends informally in practice beyond environmental concerns, and depends upon the varying degree of self-determination within each tribe. Borrini-Feyerabend et al. (2007) advocate for indigenous and local traditional communities as the “primary stakeholders”:

“The most important characteristic of local communities is that they have evolved with the natural resources, and have developed rich and detailed management systems that have stood the test of time. A variety of intruders in the community space clamor for attention and pretend to be considered rightful stakeholders. The solutions to the local problems imported by those outsiders have generally not improved the management systems devised by local communities and at times have even destroyed whatever existed and replaced it with tragically ineffective open access regimes.” (Borrini- Feyerabend et al. 2007, 55)

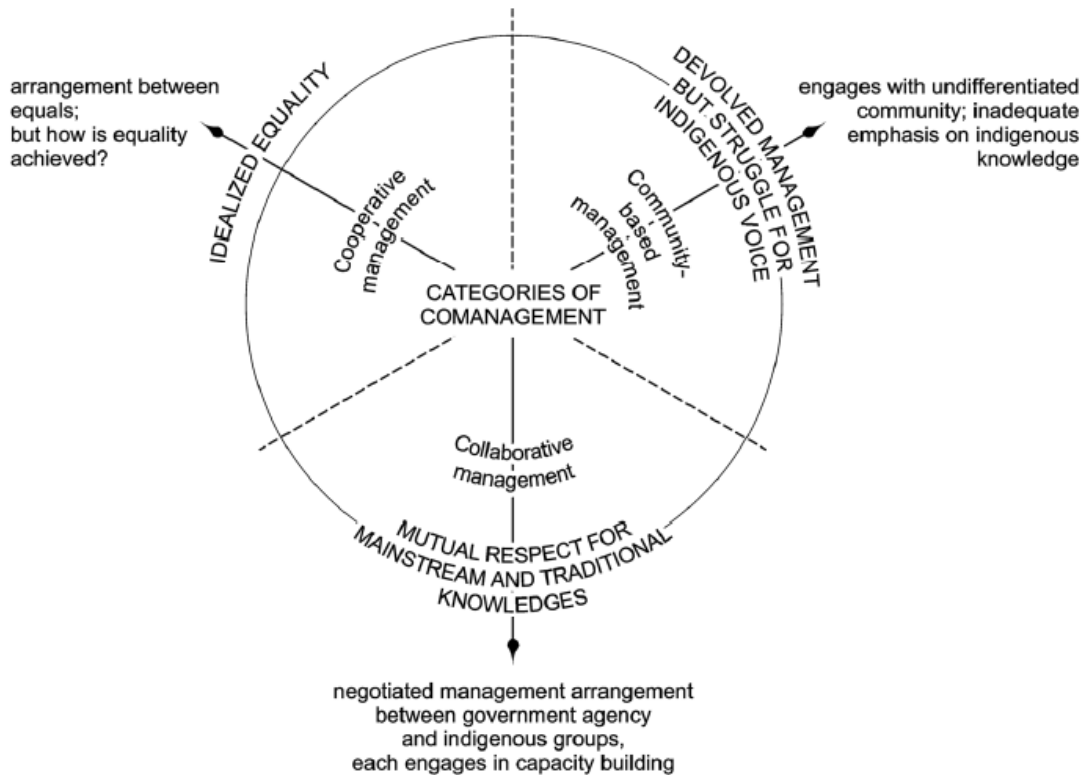


Figure 12: Indigenous perspectives on cooperation, community-based, and collaborative categories of management (Tipa and Welch, 2006)

To reduce indigenous communities to one of many stakeholders diminishes this status and serves to oppress their heritage, limiting their contribution to the collaborative process.

Figure 13 illustrates this difference in perspective between indigenous and mainstream conceptions of community-based decision-making processes.

The variance of circumstances defining each co-management case creates great difficulty in establishing a prescriptive framework, or blueprint. The basic components do not vary tremendously from general theoretical discussions of collaborative management, except to include additional fundamental components of American Indian policy, specific cultural dynamics, treaty rights, and modern Native American sovereignty.

Plummer and FitzGibbon (2004) summarize the main components of co-management from numerous case studies into a framework including the preconditions that provide the impetus for the formation of a co-management process, the characteristics repeatedly observed, and the outcomes that may be realized, shown in Figure 14.

Preconditions of Co-Management

Co-management arrangements can be as varied as the environmental conditions they address. The diversity of both native and non-native cultures, environments, state and local politics can all influence and define the nature of a management relationship. The preconditions fall into two categories, the external environment, which elicits a response from people, and the human dimensions, the direct precursors to co-management. Just as in the formation of collaborative environmental management processes, co-management formation is dependent upon external factors, such as a policy window provided after a crisis or legal decision, or the internal forcing provided by visionary leadership, able to energize participants around a common goal (Plummer and FitzGibbon, 2004). The history of relationships between actors is another important element to the pre-cursor of successful co-management. In the case of indigenous communities, the sensitive topic of past oppression is ubiquitous, and can pre-dispose the actors to fall into power imbalances based on a colonial past. As discussed earlier, the acceptance of

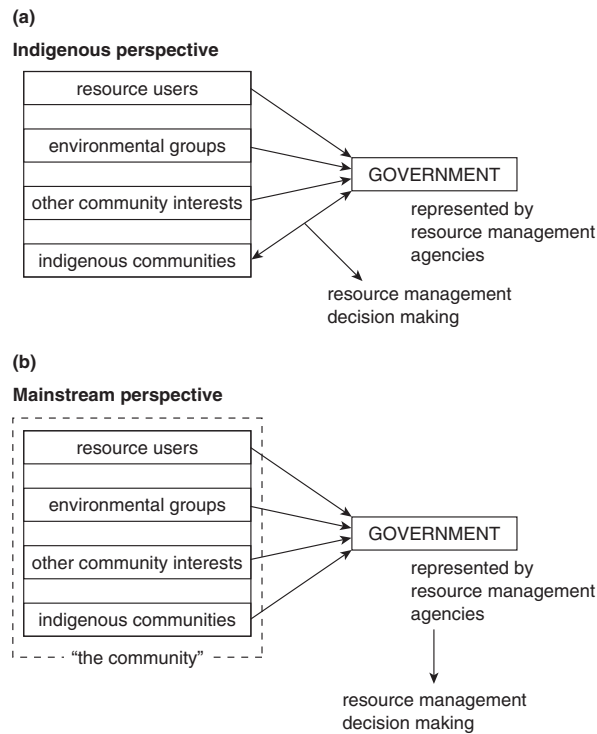


Figure 13: Indigenous and mainstream perspectives on co-management between government and indigenous community (Tipa and Welch, 2006)

institutional regimes as a management arrangement places indigenous communities in a difficult position of existing within the institutional framework of the opposite sovereign power and removes elements of their autonomy (Pena, 2005). In an example from Clayoquot Sound, in British Columbia, Canada, it was the politicization of the central ecological issues that led to co-management; for the Nuu-chah-nulth native community, as well as local citizens and environmentalists, the social, political, and ecological issues were fused in a mutual desire to gain increased control over Clayoquot resources (it is also notable that the Nuu-chah-nulth Nation has a lengthy historical experience with cooperation, resistance, and negotiation as means to forwarding their interest in relations with powerful economic and political actors) (Goetze, 2005). In analyzing co-management, it is imperative to understand the ways in which these regimes arise and are shaped by local histories of conflict, contested property rights, and

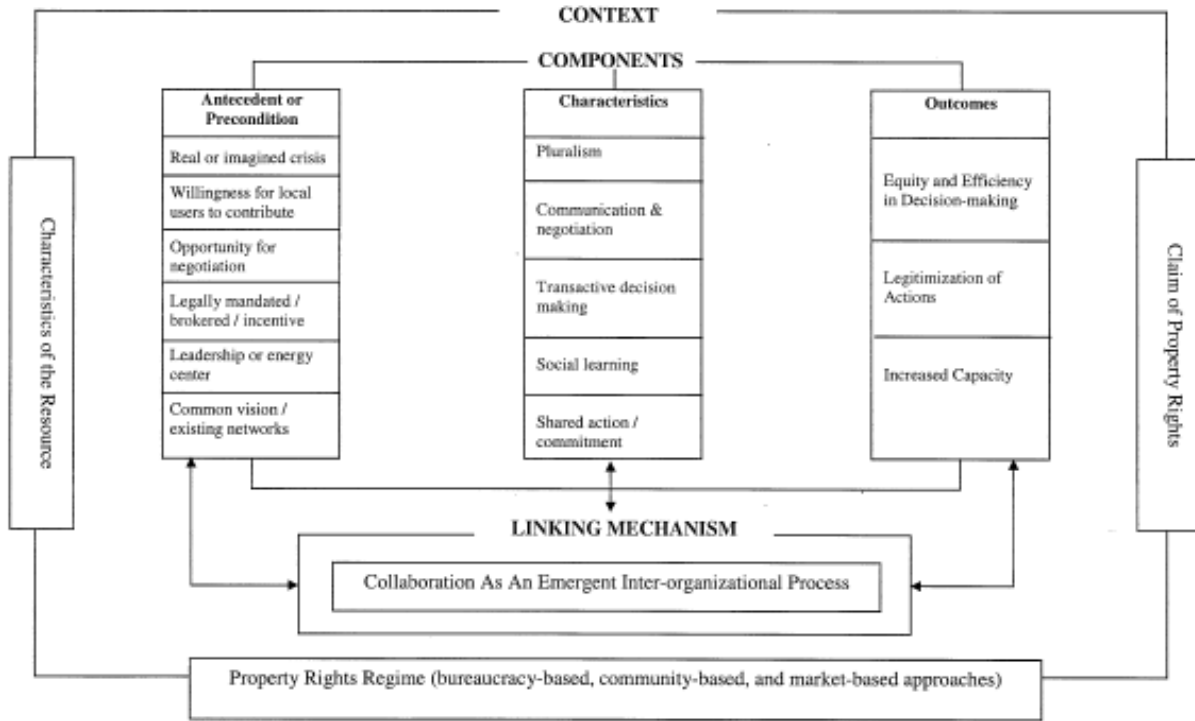


Figure 14: Conceptual framework of co-management (Plummer and FitzGibbon, 2004)

political-economic strategies (Spaeder and Feit, 2005). All of these regimes developed out of neo-liberal democratic contexts, particularly in the case of North America. This context plays a large role in dictating power-sharing arrangements, whether by design or in ad hoc fashion, the devolution of authority over matters of environmental management is still perpetuating the neo-liberal state, something that may be entirely oppositional to the community structure and cultural values of indigenous peoples, thus forcing these colonized states to again accept the management regime of the more powerful sovereign. Sovereignty in this case, does not equate to autonomy over the management of natural resources.

Co-Management Characteristics

The characteristics of co-management are indicative of the underlying process through which it operates. They are numerous and are not mutually exclusive. Power sharing

arrangements have a large effect on the success or failure of the process. “Central to definitions of co-management is the distribution of rights, power, and responsibilities pertaining to a particular resource” (Plummer and FitzGibbon, 2004, p. 878). The degree to which indigenous knowledge and institutions shape co-management practice is directly related to the power of the indigenous people involved (Mulrennan and Scott, 2005). Plummer and FitzGibbon (2004) list co-management process characteristics including pluralism, an agreed communication and negotiation format, shared commitment and implementation, reciprocal social learning, and transactive or mutual decision-making (Figure 14).

Co-management is not mandated in the U.S., and therefore requires powerful pre-conditional forces and positively perceived expected outcomes as incentive to encourage participation. The federal treaty trust obligation of the U.S. government toward Native Americans requires only consultation with affected native tribes, as prescribed in many federal laws discussed earlier. Consultation can mean as little as notification of action with little time to for the tribe to organize, engage, and respond, or it can present an opportunity for meaningful negotiations, with a recognition and acknowledgement of the information and expertise tribal partners can bring to the table. Either way, however, the federal agency dictates the initiation of the process. The operational execution of consultation practices, and negotiated MOUs between government agencies and tribes set the power dynamics in the relationship. The federal consultation process immediately creates a power imbalance with the federal government at the helm; it is the government’s prerogative to begin consultations, and its information being discussed (Haskew, 1999).

Most co-management arrangements that involve indigenous peoples are designed as measures of “consultation,” inasmuch as they legally designate “advisory” status to the co-

management board but do not involve indigenous participants in the process or decision-making with any substantive or legally binding authority and often results in the continuation of conflict and deteriorations of the resources(s) (Goetze, 2005). It is not an infrequent occurrence for this obligation to be fulfilled via an untimely letter in the mail simply informing a tribe of an action, with no option or request for a response or participation in the management process (Haskew, 1999). Though consultation processes are now established across all branches and levels of government, it is abundantly evident that consultation does not imply equal co-management.

Co-management is not a synonym of “consultation,” but a comprehensive and long-term arrangement built upon management relationships over time with a specific goal or purpose to focus on the sustainable management of a shared resource.

Tipa and Welch (2006) compare various attempts at co-management frameworks by Berkes (1990, 1994), Sen and Raajaer-Nielson (1996), and Pomeroy (1995), each of whom define categories with varying degrees of co-management in hierarchies of shared decision-making (Table 4), but suggest that comprehensive resource comanagement is not a prescribed set of steps or processes, rather defined through complex negotiation within each of the sub-processes identified (2006). What Berkes later called *real co-management*, describing a formal agreement for shared decision-making power, shared responsibility and dissipated control, still remains problematic for indigenous communities because of their limited availability of management options (Tipa and Welch, 2006).

Power Sharing

The benefits of collaborative management lend themselves best to co-management with indigenous communities, allowing “an extension to theorizing about the way power is exercised,

drawing a distinction between comanagement arrangements that empower one party over another in a zero-sum game and progressive empowerment of all parties to a management process (Tipa and Welch, 2006, p. 386). These flexible arrangements cover a range of functions, powers, responsibilities, and include local/traditional knowledge and management systems, define community in spatial terms, by economic activity, or by membership to a specific group, and engage government across all levels (Borrini-Feyerabend, 1996). Participation in the process of decision-making and an emphasis on power sharing are closely aligned with the process of collaboration (Tipa and Welch, 2006). Many problems have been identified as obstacles to reducing power-asymmetries and the effectiveness of co-management institutions. They include a lack of clarity and consistency in the interpretation of agreements, limited power to address other governmental mandates, and logistical difficulties in connecting technical scientific and bureaucratic approaches to local knowledge and management systems (Mulrennan and Scott, 2005). Of particular conflict, is the limitation of the effect of indigenous voices in the bureaucratic separation of wildlife issues from resource allocation decisions, for example, or the primacy of subsistence activities (Mulrennan and Scott, 2005). “To warrant the term ‘co-management’ should respond as much to indigenous tenure, knowledge and management practices as to state-organized property definitions, management science and bureaucracy. We have seen that such mutuality is prone to being subverted by the more powerful party imposing its wishes on the weaker” (Mulrennan and Scott, 2005, p. 207).

“Equitable power sharing arrangements between states and indigenous communities is not something offered altruistically by state authorities, but rather something won through political activism.... when indigenous people manage to threaten the interests of central governments, or of other actors who have high priority with central governments, it is more

likely that the political ‘will’ to genuinely co-manage will be forthcoming” (Mulrennan and Scott, 2005, p. 208). Recently, co-management has focused on the vertical and horizontal linkages important to institutional performance, and the capacity of power-sharing arrangements to facilitate human adaptation, while others have focused on the power imbalances that appear to persist well after the establishment of these arrangements (Kofinas, 2005). For successful collaborative management, Borrini-Feyerabend (1996) emphasized that stakeholders must negotiate the specifics of a management power sharing agreement, emphasizing the equal status of the parties to an agreement; while the opportunity for negotiation throughout a collaborative process suggests a platform where inevitable power imbalances between government and indigenous communities can be negotiated (Tipa and Welch, 2006).

However, co-management and collaborative management processes that devolve power of decision-making and action implementation among multiple participants is a difficult arrangement to make fit within the established system of oversight and authority delegated to a federal entity, with a responsibility to notify and report achievements to Congress, in order to justify funding expenditures. These arrangements are often founded in law; it is an authority that cannot be delegated and makes true co-management a difficult, and debatably impossible, assignment for a federal agency. These power imbalances are predictable, however, and by adaptation, while others have focused on the power imbalances that appear to persist well after establishing venues where they might be mitigated before causing conflict, the negative outcomes can be avoided.

Table 4: Contrasting Categorizations of Comanagement: Three Examples

<i>Berkes (1991, 1994)</i>	<i>Sen and Raajaer-Nielson (1996)</i>	<i>Pomeroy (1995)</i>
<p>Informing: Community informed of decisions made. One-way communication</p> <p>Consultation: Start of face-to-face contact. Explicit attempt to obtain the views of users. Community input heard but not necessarily heeded.</p> <p>Cooperation: There is more than just talk. Community starts to have input into management. Some appreciation of the ability of the other party.</p> <p>Communication: Start of two-way information exchange, local concerns- seen as legitimate- begin to enter management plans. Government agency retains all powers of decision-making.</p> <p>Advisory Committees: Partnership in decision-making starts. Joint action on common objectives, but co-management is still ad hoc. Committee has advisory function - recommends rather than makes decisions.</p> <p>Management Boards: Community participates in developing and implementing plans. Represents a higher rung if it has more than an advisory function. Community seeks common objectives and commitment to implementation.</p> <p>Partnerships/Community Control: Partnership of equals. Shared authority, responsibilities, decision-making, "As much local level management as possible, only as much government regulation as necessary." power and responsibilities delegated to community.</p>	<p>Instructive: Minimal exchange of information between government and users. Processes for dialogue exist but mostly to enable government to inform users of decisions.</p> <p>Consultive: Consultation between the parties, but government still makes the decisions.</p> <p>Cooperative: Cooperation between the parties to an agreement, who have the status of equal partners in the decision-making process.</p> <p>Advisory: Users advise government of decisions to be made, and government endorses the decisions.</p> <p>Informative: Decision-making authority is delegated to resource users who then advise government of decisions made</p>	<p>Consultive: Government consults with user groups and the community, but decisions are made by government</p> <p>Cooperative: Government and user groups/communities cooperate and participate in decision-making as equals</p> <p>Delegated: Management authority is delegated to user groups and communities, and government is informed of decisions made.</p>

Adapted from Tupa and Welch, 2006. The degree of cooperation increases the further an arrangement moves down the table, with categorizations for the truest form of co-management at the bottom.

In examples of successful co-management with indigenous communities, veto power over proposed decisions is retained by each entity (Donoghue et al., 2010), giving each shared negotiating power, and creating a de facto consensus-based decision-making process, if one is not explicitly identified as a partnership goal. Co-management does not demand tribal veto-power for its participants, however, as in many cases it is not feasible with the legally mandated mechanisms put in place by Congress and federal law. Co-management is a call for the end of unilateral decision-making affecting tribal rights and resources; it is a call for a process that incorporates the policy and technical expertise of each sovereign, in a mutual participatory framework (Goodman, 2000). Power sharing can be built into management arrangements in a variety of ways, throughout negotiations, technical planning, funding and implementation. The sharing of resources, human, technical, and monetary, are highly influential factors in creating mutual dependency, trust and respect in a co-management arrangement, while research suggests that it is the sharing of resources that has more impact than just the transfer of funds, in achieving shared objectives (Donoghue et al., 2010). Facilitating autonomy into the collaborative mechanism, allowing tribes to determine and implement project actions contributes to meeting cultural objectives of resource management on public lands (Donoghue et al., 2010).

Traditional Ecological Knowledge

Decision-making in co-management arenas is also strengthened by the integration of nonscientific knowledge systems, including local knowledge, indigenous (IK) or traditional ecological knowledge (TEK), and social science information. Fikret Berkes (1999) offers a

working definition of TEK as “a cumulative body of knowledge, practices, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (p. 8). It is what Levi-Strauss has called the *science du concret*, the native knowledge of the natural milieu firmly rooted in the reality of an accumulation of concrete, personal experiences, as opposed to book learning (Berkes, 1999). Many have recognized the integration of these systems to be the hallmark of co-management (Plummer, 2004).

The inclusion of TEK raises a conflict among indigenous communities, who are weary of such sacred and ancient knowledge being misappropriated by government managers and other outsiders. Indigenous knowledge is often privileged knowledge, guarded, not open to wider indigenous groups inspection and comment, and not willingly put into the collaborative or co-management pot (Tipa and Welch, 2006). The understanding of non-western traditions and entirely separate worlds of thought can create an information hierarchy in co-management situations. “[Institutionalized environmental management] privileges the expert knowledge of development planners and environmental scientists. In contrast, collaborative environmental management privileges local knowledge” (Pena, 2005, p. 147). The relationship between western science and traditional science is complex, and the differences should not be overemphasized (Berkes, 1999). Further citing Berkes (1999) on TEK, “It is difficult for people from ‘advanced’ cultures to accept the idea that people from ‘primitive’ cultures might know something scientifically significant, or even know more about a subject within the fields of natural science” (p.12). Indeed, many indigenous communities have been “managing” the environment for thousands of years, but in ways unrecognizable to the western institutions of resource

management. TEK is often an integral part of the local culture, and management prescriptions are adapted to the local areas; resource users themselves are the “managers” (Berkes, 1999).

Central to participation and power sharing in collaborative arrangements is the status accorded to such traditional knowledge, and how such information will be protected (Tupa and Welch, 2006). “TEK does not lend itself to line items in contracts or agreements. It is neither feasible nor prudent for agencies to attempt to understand traditional ecological knowledge and then develop contractual or agreement stipulations that reflect it; instead, institutional mechanisms for collaboration between tribes and agencies may need to better reflect the adaptive nature of collaboration and allow for greater tribal autonomous decision-making in order to effectively meet cultural, social, and ecological objectives of collaborative projects” (Donoghue et al., 2010. p. 34).

Formalization

The formalization of collaborative management arrangements in the form of official agreements, as MOUs or contracts, is an important element to legitimize the process and build buy-in, where trust might be tenuous due to past and present group dynamics. There is considerable importance accorded to agreed rules, norms, and structures that govern the interactions between participating groups and to the respect accorded traditional knowledge in these interactions; an agreement should be legally binding on each partner and a balance achieved between mandated interaction within the governance structure and the freedom to advocate for partners’ unique interests, as well as a mechanism for system review, and adaptation, as relationships develop (Tupa and Welch, 2006).

Co-Management Outcomes

The outcomes of co-management are debated, and highly varied. As illustrated in Figure 1, there is a feedback loop, and interconnectedness to the components that sustain a successful co-management process. Major justification for the process is provided by the outcomes of enhanced equity and management system efficiency. This result is not always the case, however, as co-management has been criticized for its perpetuation of neo-liberal governmentality. “First and central to most earlier formulations, collaborative management, agreements should deliver specific outcomes. From an indigenous perspective, these outcomes must include preservation of cultural identity; recognition of the right to access, use, develop, and protect resources; self-determination; and use of traditional environmental knowledge (Tipa and Welch, 2006).

Legitimization

Co-management processes involving indigenous peoples create an opportunity to address many longstanding issues between native communities and state or federal governments. These benefits may not be a direct solution to the management issue being addressed, but through the co-management process, many issues surrounding sovereignty and autonomy, and treaty rights are re-addressed in a modern context often with empowering results for the native community. Through the process of co-management, indigenous property ownership schemes and traditional resource management institutions are legitimized and the indigenous community is seen as more credible, self-governing organizations (Plummer and Fitzgibbon, 2004). “The power-sharing implicit in the idea of co-management seems to assist the project of decolonization” (Mulrennan and Scott, 2005). It is imperative that state and tribal policy-makers enter these negotiated settings with an understanding of the entire context of the social-ecological system being

addressed, and the historical and cultural context of the indigenous community involved (Goetze, 2005). An informed understanding of Native people's relationship to their natural resources and what that means for their role in environmental management is foundational (Ranco et al., 2011).

As a construct, legitimacy is defined as authority, rightfulness and/or truth that is in accordance with established or accepted forms or requirements, it is a human perception that can be maintained, cultivated or eroded, and therefore is dynamic and subject to change (Kofinas, 2005). Inherent in these perceptions of legitimate environmental governance are two fundamentally opposed epistemologies regarding natural resources. "Lakota scholar Vine Deloria, Jr. once observed: "the problem with American is that is a 'rights' society, and not a 'responsibilities' society" (Ranco et al., 2011). Whereas the Pacific Northwest tribes have forever possessed a mutual respect and obligation to the salmon, originating from a covenant of reciprocity formed long ago (Ranco et al., 2011), the arrival of European settlers immediately brought the profit-driven industrialization and commodification of the sacred fish.

Common perceptions of legitimacy are an important component of social capital, and a requirement to achieving consensus among parties (Kofinas, 2005). The three interrelated dimensions of legitimacy important to co-management performance include:

1. Legitimacy of governing institutions, such as the formal agreement establishing a co-management partnership;
2. Legitimacy of knowledge, and implicit paradigms guiding the production of knowledge used in a co-management decision-making;
3. Perceived legitimacy of individuals and organizations stewarding the co-management institution (Kofinas, 2005).

Values, opinions, and behaviors are shaped by the interactions of these aspects of legitimacy at various levels of institutional processes.

Capacity-Building

Many environmental justice and indigenous rights advocates are optimistic about the co-management of environmental resources' potential impacts toward indigenous autonomy, and re-connecting ancestral relationships with natural resources and the environment. The building of local level management capacity allows the opportunity to exercise self-determination, as localized controlled actions characterize empowerment, community development, and a bottom-up approach (Plummer, 2004). There is a growing willingness to include indigenous worldviews in federal land management (Kenney, 2012). However, positive tribal empowerment is not always the case, as it has been observed, "in practice, the result may not be power sharing, but rather a strengthening of the state's control over resource policy, management, and allocation, further marginalizing indigenous communities" (Plummer, 2004, p?). Challengers to collaborative governance disagree about the benefits of consensus processes, and bias toward place-based communities, and question whether collaboration is inclusive of diversity or only reinforces power disparities between stakeholders (Koontz and Thomas, 2006).

This expansion of governmentality, by handing down aspects of regulation to the community level, is evidence of the manipulation and domination of one sovereign over a lesser sovereign power. One might argue that the inclusion of indigenous peoples in management decision-making is a step toward equity; however, observation has shown that equity, in this case, does not always equal autonomy. "The theory of autonomy proposes that we focus on place-specific forms of communitary control of environmental governance that derive from the persistence of local customary law and practice" (Pena, 2005, p. 146). For indigenous communities in settler states, equitable participation in co-management processes carries with it implicit assumptions. By agreeing to participate, the tribe, in the case of Native Americans, is

submitting to the sovereign status forced upon them by a coercive and violent treaty processes. Considering these legal limitations in the participation in environmental co-management, “the struggle for sovereignty by Native peoples can be envisioned as less about control of particular policy domains than of metapolitical authority- the ability to define the content and scope of ‘law’ and ‘politics’” (Rifkin, 2009, p.90). The autonomous management over natural resources has beneficial outcomes for tribal wellbeing beyond just protecting the resources themselves, but ensuring the tribe’s ability to manage the resources (Ranco et al., 2011).

Many believe that co-management processes, especially regarding environmental management, provides an opportunity to progress beyond this unequal state, and bring treaty rights into a modern context, allowing tribes to exercise or express their rights for self-determination (Mulrennan and Scott, 2005; Pena, 2005; Ranco et al., 2011; Kenney, 2012; Spaeder and Feit, 2005). And through this process, we are gaining a better, more equitable definition, of treaty rights and tribal autonomy. In the example involving the Nuu-Chah-nulth from British Columbia, the power-sharing arrangement involving the first nation’s veto-power effectively created a state of empowered co-management, “so termed as it exceeds the advisory powers co-management regimes typically allow indigenous participants to practice...it is empowering in that it facilitates the exercise of power historically held by Aboriginal peoples in managing their resources as autonomous nations” (Goetze, 2005, p. 255).

It is also “increasingly evident that the knowledge and participation of indigenous communities is fundamental in devising strategies for environmentally sustainable resource use, and for coping with environmental changes that are both local and global in scope and consequence...The movement is testing the limits of state systems to achieve genuine decentralization, sharing of powers, and the accommodation of indigenous ethnonational

aspirations” (Mulrennan and Scott 2005, p. 198). “Collaboration achieves this by exchanging information, altering activities, sharing resources and enhancing the capacity of another for mutual benefit and to achieve a common purpose” (Tipa and Welch, 2006, p. 387). The role of the environmental justice movement in the evolution of co-management has been mutually beneficial, but also lead to a misappropriation of the movements’ missions. Environmental justice has been integrated into governance as an increasingly ubiquitous requirement to implement government programs that combat the historical institutionalization of environmental racism (Pena, 2005). However, the EJ assessment performed in these processes can function as window dressing to a more thorough and in-depth analysis of the supposed program impacts. In this case, EJ assessments are an example of continued governmentality, not leading to autonomy over decision-making regarding the program and community being assessed. These conflicts make co-management processes sensitive and complex, requiring the practitioner to navigate a situation with an adept understanding of cultural nuances and unique local histories.

Environmental Management Benefits of Co-Management

Besides the legal and moral imperative for co-management, perhaps most importantly, there must also be beneficial outcomes for shared management to create an incentive for its prolonged and committed existence among participants. The social benefits of co-management extend beyond the cultural component as well, including improvements in efficient governance, conflict resolution and avoidance, and equitable allocation of resources and resource use. Co-management is included in the discourse around collaborative governance as a positive alternative to hierarchy and regulation, a healthy response to policy gridlock and litigation grounded in interest group pluralism, leading to better decisions, and equitable solutions while

increasing citizens' capacity for self-governance through a more democratically accountable process (Koontz and Thomas, 2006). Identifying proven environmental outcomes certainly raises the incentives for state and federal government resource managers to engage in collaborative processes, or empowered co-management processes, in the case of indigenous communities. – which, optimistically, will continue to improve these processes and lead to more positive social outcomes. “Resource management should be approached as a practical exercise that, ideally, should meet several public policy objectives: these include legal or human rights, economic efficiency, social and economic equity, as well as conservation” (Goetze, 2005, p. 249). It is important to understand the enviro-socio-political dynamics that characterize indigenous communities' understandings of resource management that, in turn, inform their claims against government, or how a uniquely empowered form of co-management may develop to bolster existing management institutions (Goetze, 2005).

The potential for conflict reduction and prevention via participatory democracy and mutual understanding of historical community dynamics have been demonstrated in many cases throughout the literature (see the new James Bay Northern Quebec Agreement (Mulrennan and Scott, 2005); the Porcupine Caribou Management Board (Kofinas, 2005); wolf recovery co-management between the Nez Perce and USFWS, and the Confederated Tribes of the Warm Springs Reservation and the BLM and USFS MOU on forest management (Kenney, 2012). The resolution of conflicts contributing to natural resource crises is linked to more effective management of the resource through increased resource user involvement in its management process; the socio-political element (user participation) was generally considered to serve the greater environmental goal (improved resource management), and reduced stakeholder conflict led to enhanced ecosystem health (Goetze, 2005). Many questions remain in linking and

measuring precise outcomes of collaborative environmental management processes with positive environmental outputs and outcomes, which require a long time scale and is a difficult task to identify the causal effects originating from the management practices. “A considerable gap remains in our understanding of the effect of process characteristics and policy outputs on environmental outcomes (such as changes in land cover, biological diversity, pollution, and other measures of environmental quality)” (Koontz and Thomas, 2006, p. 118). Should successful co-management not be a means to an end, of improved environmental quality, and not the goal itself? It is extremely difficult to identify environmental outcomes although it is suggested that an improved social climate will likewise improve the environmental problem it serves to address (Koontz and Thomas, 2006). In practice, co-management had proven to be slower, more costly, and more administratively complex than traditional top-down management, and has often led to the disruption of historical power dynamics dominated by business interests in local resource extraction based economies, leading to public opposition. These conflicts present even more reason for an inclusionary participatory process with a sustainable and robust outcome. Although the social benefits are well documented, it remains to be determined if this is an acceptable outcome in regard to environmental sustainability over the long term.

The foundation for co-management with Native American tribes is stated in the original binding treaties signed during the era of European settlement circa 1850. The language of each of these documents varies, as do the rights held by the tribes named. Nowhere has that language been tested and utilized more than in Washington State.

CO-MANAGEMENT IN WASHINGTON STATE

In the mid-19th century, European settlers began arriving in the Northwest Territories with a great interest in its natural resources, including its famed salmon fishing. Commercial fishing endeavors expanded rapidly as technology improved, and catches increased dramatically enabling onshore canning industries to flourish. Initially, settlers copied many of the fishing techniques they observed used by the natives, but fishing was rapidly industrialized, allowing non-Indian fishermen to outcompete native fisherman at favored fishing sites and intercept much of the catch before it reached the rivers. Newly and rapidly forming laws put geographical boundaries and jurisdictional regulations onto the first inhabitants, creating layers of complexity on both the species exploited and native society. Homestead laws allowed non-Indians to obtain property rights to prime fishing sites, and newly created licenses put regulatory barriers between natives and their fish. “Indian fishermen found themselves at the end of the line, allowed to harvest the few salmon that remained after passing through these fisheries” (Ebbin, 2002, p. 159).

The treaties arranged between Native Americans and the U.S. government in the Pacific Northwest are unique in that they explicitly recognize the tribes’ reserved right to take fish, hunt, gather, and in one case whale, in their usual and accustomed (U&A) areas off-reservation, “in common with all citizens of the territory,” meaning that tribe members were not subject to state regulation on seasons, limits, permits, and gear restrictions. However, the exact interpretation of the original wording, “in common with,” and its implication for tribes competing in state regulated fisheries would be debated through litigation for years. “In the following years, the government made little effort to ensure the tribes any harvest of salmon, and after statehood, the

Washington legislature enacted a series of increasingly restrictive regulations aimed at tribal fisheries” (Ebbin, 2002, p. 165). The tribes turned to the courts to uphold their rights to harvest salmon.

Many Native American tribes and their members began asserting their reserved rights to fish, hunt, trap, and gather off of reservation lands in the 1960s and 1970s (Goodman, 2000). Exercise of these rights goes beyond just the action itself, but are politically, culturally, and economically important to the tribe’s livelihood, identity, and cultural legacy, which is passed from generation to generation, connected through a long history of place (Goodman, 2000). C.F. Wilkinson (1992) describes this period in, *Crossing the Next Meridian*, “as fish populations dwindled in the mid 1900’s, due to rampant damming of the rivers, and poor resource management, conflict arose around Indian fishing being considered “‘above the law,’ smacking of special treatment and privilege” (p. 204) – unregulated fishing was no longer going to be tolerated. Tribal members, who had seen the bounty of natural resources from less than a century before rapidly depleted, did not appreciate this irony. Treaty time was still vivid to tribal people in the 1960’s. “The century since the treaties had not changed the essential things for reservation Indians. Subsistence fishing and hunting still provided a significant part of their diet. The old religions still had proponents, and the Indian way – a light, easygoing way of life anchored to the land – still prevailed. A century later, there were still Indians” (Wilkinson, 1992, p. 204). The following decade would see a barrage of litigation defending tribes’ reserved rights to these resources. Tribes were outraged by the idea that state, rather than tribal, regulation was needed for conservation when it was abundantly evident that development by non-Indians had brought down the runs, whereas Indians had never wasted a single fish (Wilkinson, 1992).

Fish Wars

The legal precedent for reserved rights to fish at U&A areas was set in the original treaties themselves. However, it was not long before those clauses were being challenged in court. The Lummi Tribe was the first Puget Sound tribe to bring the issue of treaty fishing rights to court. In 1897, it brought suit in *United States v. Alaska Packer's Association*, for the encroachment by white men on their tribal fishing grounds, and ensuing conflict which drove the native fishermen off of the site and prevented them from placing their traditional fishing nets and traps (Ebbin, 2002). The court ruled against the tribe, and the U.S. Supreme Court refused to hear the case. In 1905, the U.S. Supreme Court handed down its first ruling on the matter in *United States v. Winans*. In an oft-cited decision, it ruled in favor of the Yakama Nation, that the treaty right was more than just the right of equal access to the fishery at usual and accustomed sites, but meant that their access to those sites was guaranteed even if the property had been acquired by a non-Indian (Wilkinson, 1992). The case has become a cornerstone for the recognition and protection of off-reservation reserved rights to hunt and fish (Goodman, 2000). The unanimous decision involved the interpretation of the 1855 treaty and found that, “the right to fish ‘was a part of larger rights possessed by the Indians and even though the land had been ceded away, fishing rights at the traditional stations had been expressly reserved...Justice Joseph McKenna reasoned, the result could not be otherwise: ‘The right to resort to the fishing places in controversy...[was] not much less necessary to the existence of the Indians than the atmosphere they breathed’” (Wilkinson, 1992, p. 205, p. 205). “The court articulated a principle of the Indian Treaty interpretation that has shaped Indian Law ever since: Indian treaties did not involve a grant of rights *to* the Indians, but were rather a grant *from* them, and therefore, reserved those rights not granted to the United States by the treaty” (Goodman, 2000, p. 286).

A second ruling in favor of the Tribes came in *Tulee v. Washington*, in 1942, when the U.S. Supreme Court found that the state of Washington could not impose a licensing fee on Indian fishermen. George Dysart, of the Solicitor's Office of the DOI, who was an early advocate for the tribes and first defended Indian fisherman in various county courthouses (stated, "Nothing had happened since the treaty to extinguish the tribal rights recognized in the two opinions" (Wilkinson, 1992, p. 205).

After the construction of the Dalles Dam flooded the famed fishing grounds at Celilo Falls on the Columbia River, *Sohappy v. Smith* (1968) was brought before federal Judge Robert C. Belloni. On Dysart's recommendation, the U.S. filed *United States v. Oregon*, as a companion to the case, defending a Yakama Indian fisherman against Oregon state fish and wildlife officials who had managed the fishery in such a way that it imposed on the native fishermen's capability to fish at usual and accustomed sites upriver (Goodman, 2000). Judge Belloni ruled in favor of the Indian fisherman on all issues, and sought to articulate the quantity of fish to which the tribes were entitled, requiring that the state must regulate fishing practices to ensure that a fair and equitable share reached Indian fishing sites (Wilkinson, 1992). In the Celilo Falls case, he ruled that even though the four tribes had been compensated for the flooding of their traditional sites, they were still entitled to their treaty right to fish in the pool behind the Dalles Dam (Wilkinson, 1992).

Attention then moved to Puget Sound, where the Fish Wars were underway, and fish-ins and demonstrations were garnering nation-wide attention. Prior to this time, the Washington Department of Fisheries (with regulatory authority over commercial fishing, including all salmon fishing) had implemented its interpretation of the treaty language to mean the tribes were entitled to a "fair share," which reached as high as one-third of the runs of streams where traditional sites

existed (Wilkinson, 1992). The Washington Department of Game, which had jurisdiction over sport fish, including steelhead, argued that the tribes had no special rights at all (Wilkinson, 1992).

In the 1960's and '70's, clashes took place as tribal members ignored the state's regulation, and exerted their rights off-reservation. In a 1963 case, *Washington v. McCoy* (63 Wn. 2d 421 (1963)), the state supreme court ruled that Washington State had the authority to regulate tribal fishing for conservation purposes. Upon this ruling, state game wardens started to arrest Indian fishermen for violating fishing regulations. In 1970, police raided a Puyallup fish camp. Shots were fired, and dozens were arrested, although charges were eventually dropped. Harassment of this sort was common for tribal fishermen who dared put their nets in the water, because "police arrested tribal members for poaching, even while fishing on reservation lands — prompting tribal members to defy police with staged 'fish-ins' as cameras rolled, documenting the arrests" (Mapes, 2010). In a famous episode, actor Marlon Brando joined Nisqually leaders Bob Satiacum and Billy Frank in their canoe and dared the watching police to arrest them. They did, and cameras caught this and many more conflicts, making the ongoing legal battle a high-profile civil rights case.

The Boldt Decision

In *United States v. Washington* (the Boldt Decision)(384 F. Supp. at 343 [1974]), 14 tribes in western Washington held a basic view that the treaty language, guaranteeing them rights to fish "in common with the citizens of the Territory" meant they were entitled to an opportunity to take 50 percent of the runs that passed their fishing grounds" (Wilkinson, 1992, p. 206). Judge Boldt held for the tribes on all counts, and employed an interpretation of the treaty

that included a period dictionary to define the understanding of the terms, as used in the mid-1800's. "In common with," in this case, meant "equal," and Judge Boldt held that Indian fishers were entitled to the opportunity to take an equal 50 percent of all salmon and steelhead that passed by their U&A sites. Judge Belloni modified his previous "fair and equitable share" provision from the *Sohappy v. Smith* (1968) case and adopted the Boldt 50 percent rationale, applying it to the Columbia River (Wilkinson, 1992). The Ninth Circuit Court of Appeals arguably upheld both the Belloni and Boldt decisions in 1976 by refusing to hear either. However, this did not prevent the states from refusing to enforce the new laws. "On several occasions, the state of Washington or private groups took issues to local state courts, who refused to enforce Judge Boldt's rulings in spite of the constitutionally mandated supremacy of federal court orders" (Wilkinson, 1992, p. 207). Conflict continued between tribal and non-tribal fishermen; counter-protest fish-ins by non-Indian fishermen took place, and activism continued on both sides. "The violence came to a head in 1976, when a non-Indian fisherman was shot and paralyzed by a state fisheries enforcement officer attempting to arrest him for illegal fishing" (Ebbin, 2002, p. 167). These conflicts prompted the Washington attorney general (and later Senator) Slade Gorton to seek review of the case in the U.S. Supreme Court in 1979. The Supreme Court refused to hear the case, and took the rare occasion to comment on the state's conduct and its constituency, likening it to the inexplicable refusal of court orders seen in the civil rights struggle the previous decade:

"The state's extraordinary machinations in resisting [Judge Boldt's 1974] decree have forced the district court to take over a large share of the management of the state's fishery in order to enforce its decrees. Except for some desegregation cases... the district court has faced the most concerted official and private efforts to frustrate a decree of a federal court witnessed in this century." (Wilkinson, 1992, p. 207)

A foundation of case law and precedent has been established for the interpretation of treaty rights for Native Americans based on the multitude of cases throughout the past century. These general principles include:

1. These rights are rights that tribes have generally held since time immemorial, and their reservation of such rights creates a cognizable property interest
2. Tribes who reserved off-reservation rights may exercise those rights under their own regulatory jurisdiction and generally may not be limited by the state (with the exception of regulations necessary for the conservation of the resource)
3. The rights involve a substantive entitlement to an actual harvest of resources (according to Goodman, 2000).

This third principle explicitly stipulates that before the western Washington tribes who intervened in the Boldt Decision can exercise their right to harvest half of the fish, there must be fish to catch in Puget Sound rivers. Due to the loss and degradation of resources – and the subsequent negative impact on tribes to exercise their reserved right – it is asserted that the rights reserved by the tribes also include a right to habitat protection (Goodman, 2000). It was expected during treaty making that there would be sufficient resources available in order to assure that those reserved harvest rights were meaningful. Additionally, the federal trust obligation required that the U.S. government would not infringe or degrade those reserved rights (Carter, 2011; Wilkinson, 1992; Goodman, 2000; Kenney, 2012).

United States v. Washington was initially split into two phases. The Boldt Decision applied to Phase I, the scope and quantity of the tribes' right to fish, while Phase II (commonly called Boldt II) involved two issues, one addressed whether the tribes 50 percent right to fish included hatchery fish, and the other addressed tribal rights to prevent habitat degradation that adversely impacted anadromous fish habitat and populations. In 1980, Judge Orrick ruled in favor of the tribes on both Phase II issues (506 F. Supp.187, 190 (W.D. Wash 1980). Regarding

the habitat protection issue, the judge was quoted, “the right to fish, which had ‘overriding importance’ to the tribes, ‘implicitly incorporated...the right to have the fishery habitat protected from man-made despoliation...The most fundamental prerequisite to exercising the right to take fish is the existence of fish to be taken’” (Goodman, 2000, p. 293). Washington State appealed the decision to the Ninth Circuit, where the hatchery fish allocation was upheld, but the habitat protection clause was reversed. The tribes petitioned the court, and were granted a rehearing to review the case en banc. There, in 1985, the same ruling was handed down, and Judge Orrick’s decision was vacated and deemed unripe for decision because the tribes had sought broad declaratory relief against the State of Washington for any actions that would degrade habitat. The judges required that the tribes bring a specific case to court where actual harm was evident, making the issue ripe for adjudication. Although the Boldt II case was vacated by the courts, “the right to protection of habitat can be reasonably inferred from the existing case law” (Goodman, 2000, p. 294).

Tribes as Co-Managers

As a result of the Boldt Decision, treaty tribes were declared co-managers of the fishery resources in Washington, sharing the management authority with the state. In 1974, the Northwest Indian Fisheries Commission (NWIFC) was formed, to provide technical and policy assistance to tribal fisheries management programs. Even still, non-Indian fishermen continued harvesting large numbers of salmon off the Pacific Coast, diminishing their returns to Puget Sound rivers and streams, and causing closures of in-river tribal fisheries for conservation reasons (as allowed in foundational case law of treaty fishing rights) (Ebbin, 2002). The Hoh, Quileute, and Quinault coastal tribes filed suit to stop this unregulated harvest in *Hoh v.*

Baldrige, 1981. The court ruled in the tribe's favor, creating a new policy termed "weak stock management," which changed the harvest allocations from being based on aggregate stocks within a species, to a river-by-river, run-by-run system, of which the tribes were entitled to 50 percent (Ebbin, 2002). The court also directed the state and tribes to develop mutually agreed upon "practical and flexible rules" for the management and allocation of salmon, allowing flexibility so as not to result in the disproportionate burden of fisheries closures on any one tribe or fishery (Ebbin, 2002). These escapement quotas have subsequently been negotiated on an annual basis.

A new governor brought a new approach to handling these fisheries management conflicts. Governor Spellman ushered in personnel and cultural changes in the WDF, including a former lawyer as the new director, and took a critical look at the state's losses regarding tribal fisheries, charting a different course with a policy of cooperation, rather than litigation, trying to work with tribal fisheries managers for negotiated decisions, instead of them being handed down by the courts. Some state employees openly rebelled against these policy changes, believing the WDF should not be abdicating their authority over statewide fisheries (Ebbin, 2002).

Despite internal opposition, the landmark Port Ludlow meeting in 1984 marked the first salmon co-management meeting between the state and tribes. This led to the redrafting of the Puget Sound Salmon Management Plan in 1985, with guidelines for the joint state-tribal management of Puget Sound salmon fisheries, including a schedule for the release of technical stock assessments and fishing plans requiring regular joint-meetings (Ebbin, 2002). Co-management proceeds through a series of meetings among state and tribal managers, often with flexible agendas and informal structure. Voting rarely occurs, since consensus is necessary before the implementation of any proposal (Ebbin, 2002). Since 1996, as a result of Referendum

45, a nine-member appointed Fish and Wildlife Commission took over responsibility for the state's fishery policy. Co-management has evolved into a flexible umbrella encouraging the state-tribal cooperation on new initiatives and projects focused on various fisheries issues.

Although Boldt II remained vacated by the courts, the existing case law, and looming threat of renewed litigation to settle the habitat protection issue, prompted Washington state to proactively enter into negotiations and consultations with tribes on a variety of resource issues in newly created venues. The Timber, Fish, and Wildlife Agreement was established with the state Department of Natural Resources (DNR) to create a venue, "a roundtable," where the issues of habitat protection, cultural resources, and treaty rights on state lands could be raised in an open and flexible manner, to achieve the goals outlined in the state's Cultural Resource Protection and Management Plan (WDNR, 2008). The T/F/W Roundtable functions with consensus rulemaking, and produces annual progress reports to, "facilitate the identification, protection, and management of cultural resources that are significant to the history and cultures of the people of Washington State, and which are located on the state's non-federal forest lands" (WDNR, 2011, p. 2). The state of Washington also set a foundational policy across state agencies in 1989 for consultation on every policy matter that impacts tribes in the Centennial Accords. Its purpose was to improve the relationships between sovereigns, and create "a framework for that government-to-government relationship and implementation procedures to assure execution of that relationship" (GOIA, 1989).

Often, the responsibility for the upholding of treaty obligations is passed down to lower and lower levels of government, where the mandates become diluted and implementation of consultation procedures become lax [Carter, 2011]. Local county and city governments consult tribes haphazardly, some much better than others, and establish MOUs to outline collaborative

agreements on an ad hoc basis. These MOUs are not required, however. While some local governments embrace the progress since the Boldt Decision and honor the tribe's co-manager status as a victory for environmental justice, some ignore these concerns and demonstrate little evolution from the social norms of decades past.

After the establishment of co-management for salmon harvest among western Washington tribes, tribal consultation was expected to improve dramatically. However, change was slow. In a 1999 evaluation of the status of co-management in Washington State, tribal leaders interviews expressed criticism that there still was not an agreement on the meaning of co-management or the means for implementing it (Prothro, 1999). Tribes cited the need to jointly establish rules and policies, while state managers were challenged by the lack of legal doctrine for the implementation of co-management. Both parties expressed differing expectations of the other, emphasizing this need for rule definition in the co-management process. Some thought that co-management meant that agencies would carry on with previous responsibilities, but with greater consideration of each other's needs, while others thought they would uphold co-management by managing through consultation. Tribes cited exhausting consultation practices with various agencies, and tribal leaders pointed out that tribes need to be treated as unique entities, "there is no such entity as, 'The Tribes'" (Prothro, 1999, p. 10). Recommendations for improvement included a number of arrangements through which to formalize the co-management process, establish performance measures, recognize the NWIFC, and to seek a way for the state and tribes to work together immediately to establish a joint salmon restoration plan (Prothro, 2002).

Co-management of salmon harvest in the Pacific Ocean now operates through a public process with state, federal, and tribal representation. The Pacific Fishery Management Council

process sets annual harvest rates for federal waters in the Pacific ocean salmon and groundfish fisheries through a series of meetings where state and tribal representatives sit on both the council and its technical committees (WDFW, 2013). The North of Falcon process is an annual series of public meetings through which the inland recreational and commercial salmon harvest seasons are determined. State, tribal and non-tribal representatives participate in this process and sit on the North of Falcon technical committees (WDFW, 2013). Co-management also occurs during monitoring and analysis of fisheries harvest and population data, hatchery operations, and habitat restoration. “These examples demonstrate that co-management is an ongoing, evolving process. It's guiding principle is that much more can be done to strengthen, preserve and restore salmon and steelhead resources by working together in a cooperative manner” (WDFW, 2013).

The tribes continued to pursue opportunities to bring a case to adjudicate Phase II of the Boldt Decision, the protection of salmon habitat. In 2001, the tribes filed suit regarding the state's responsibility to fix publicly owned culverts that impede salmon migration. Billy Frank, chairman of the NWIFC and Nisqually activist commented on the case:

“Twenty-five years after the Boldt Decision, the tribes are today harvesting about the same number of fish as they were before the ruling in that case. If we are going to achieve our shared goal of salmon recovery, we must begin to meaningfully address the main cause of the salmon's decline, which is loss and degradation of spawning and rearing habitat. This court action is a step in that direction” (Ebbin, 2002, p. 172).

In 2010, the State Commissioner of Public Lands put out *Commissioner's Order: 201029 on Tribal Relations* (Goldmark, 2010). In it, Goldmark expressly intended to improve the relationships between the state DNR and Washington's 29 tribes, both individually and collectively and proclaimed the following guiding principles for interactions with tribal governments:

1. Respect for sovereignty
2. Interdependence
3. Sustainable use
4. Sound science
5. Transparency
6. Respect for traditional knowledge and cultural values (Goldmark, 2010).

This order also created the DNR Tribal Relations Office, tasked with assisting the department in implementing effective government-to-government relations (Goldmark, 2010).

In 2007 Judge Martinez ruled on the Boldt II case in favor of the tribes, and the improvement of state owned salmon blocking culverts (Blumm and Steadman, 2009). The state appealed that decision and twelve years after it had originally been filed, Judge Martinez again affirmed his previous decision, and ruled in favor of the tribes. . On March 29, 2013, the court ordered the \$1 billion restoration of 1,000 state-owned or -maintained culverts within a 17-year timeline on the basis that the culverts were in violation of treaty rights for the protection of salmon habitat. The state has again appealed the decision to the Ninth District U.S. Circuit Court. . This ruling, though already being implemented to some degree in practice, provides a legal mandate for the co-management of salmon habitat in addition to their harvest. Prior to this case, there was no legal mandate forcing the standardization of shared habitat management, as is in place for fisheries co-management. The implications of this ruling are widespread, and provide much more power for tribes in regional resource management issues, because salmon habitat includes a large portion of land area and land management practices in western Washington besides the culvert issue.

Much has changed since the 19th century, and along with shifts in environmental policy toward more ecosystem-based approaches (Layzer, 2008), many now recognize the ecosystem relationships of salmon, and the interconnectedness with social systems. “This paradigmatic

change reflects traditional Indian ideologies as well as current scientific understanding. Comanagement has provided tribal leaders with a platform to voice their cultural beliefs and management philosophies” (Ebbin, 2002, p. 173). In cases where regulation is absent or inadequate, where the impacts to the salmon resource are not considered in formal regulatory processes, tribal co-managers have tenaciously forged linkages to other forums in which they are addressed. They have attempted to rewrite agendas to include a focus on salmon, to capture and contain the impacts by moving to more explicit regulation” (Ebbin, 2002, p. 174), thereby forging institutional linkages.

CASE STUDY: CO-MANAGEMENT OF THE ELWHA RIVER RESTORATION PROJECT

PRE-CONDITIONS OF CO-MANAGEMENT: COLLABORATION AT THE ELWHA RIVER

It is difficult to pinpoint the exact time when the efforts began to advocate for the removal of the fish blocking dams and restoration of the river. As previously described, from before the dams were built, dissidents were advocating against them and moving for mitigation measures to save the rapidly declining fish populations. The 1914 contract between the WDF and the dam owners prevented the state from mandating any major changes to improve the ecological conditions of the river [Crane, 2011]. By mid-century, the anti-dam sentiment in the local Port Angeles community was gaining momentum, as local sportsmen had been fighting the dam for decades. A letter from a Port Angeles resident in 1949 reflects frustration in the confusing state of fisheries regulations, dam operations, and Indian law at the time, by pointing out the disproportion scale of justice being served against differing resource users, “Is it just that one

man can control a river which belongs to all of us, kill millions of fish each year and not even one word is whispered about? And if you or I ever even gaffed one salmon we would be convicted. I am still confused” (Crane, 2011, p. 128). A letter to the WDF Technical Director Milo Bell in 1956 expressed anger over the worsening situation in the Elwha, “I’m sending you 66 small salmon fry which I picked up dead. I arrived at the river about 10:30 am and the water was low. Then about 11:30 they raised the water up about 14 inches – and then about 1:30 pm the water was dropped about 12 inches and these fish were picked up at approx. 2:00 pm. ...I wonder who is responsible for this destruction of fish?” (Crane, 2011, p. 128). A second letter from a local fisherman promised to continue sending these dead fish found stranded on the banks of the Elwha River to supply to necessary proof (Crane, 2011).

The USFWS and WDFW slowly gained a reluctance to rely on hatcheries and technological solutions to combat salmon population decline, while heated resistance to dams amplified across the American West and support grew for the diversification of electrical power sources away from a reliance on hydropower projects at the expense of salmon, (Crane, 2011). All of these factors energized the external social climate surrounding the issue of dam removal on the Elwha River, attracting more and more environmental activism. Politically, the period from the 1970’s saw a dramatic shift in environmental ethics in America (Koontz et al., 2004). The ‘80’s brought a backlash with efforts by the Reagan administration to limit environmentalism, and many conflicts were pitted as environment versus jobs debates, which was especially relevant to the Washington timber industry and the impact of spotted owl protections in old growth forests (Crane, 2011). These changes in the social and political climate in the U.S. contributed to the debate and conflict surrounding the Elwha River. It was within this volatile context that the FERC proceedings regarding the licensing of the Elwha River dams

were taking place. The interveners in those proceedings would learn that none of them had the power or stature to single-handedly take on the dam owners, and a federal regulatory agency, and an intense political debate in Washington State and Washington D.C. What followed was an alignment of forces around a common goal: dam removal and river restoration. The Elwha Tribe, despite a century of subjugation via the precedential impacts of the settlement era, misunderstood treaties, and oppressive Indian policy made themselves the leaders of this battle, determined to get their beloved river back.

ELWHA DAM RE-LICENSING

Ownership of the dams changed hands over the years from the Olympic Power Company to Crown Zellerbach, who filed for the licensing of the Elwha, and re-licensing of the Glines Canyon projects, in 1968, and 1973, respectively. This set off more than two decades of debate surrounding the jurisdiction, legalities, fisheries issues, and infrastructure damage in downstream municipalities.

In 1971, the WDF conducted an analysis (funded by Crown Zellerbach) of the Elwha River's fisheries and opportunities for their improvement. Notably, the study cited the excellent habitat and pristine nature found upstream of the dams within the boundary of the national park. The study also surveyed the river for its salmon potential and the opportunity cost of the lost revenue from the commercial harvest of salmon (Crane, 2011). The study found that \$375,000 of value could be regained each year with just the restoration of the spring Chinook run. These costs were weighed against the costs for repairs and installation of fish passage facilities at \$550,000, with annual costs of around \$32,000. Even without considering the other Chinook, coho, sockeye, chum, and pink salmon runs, the river would have recouped these costs in two

years of a fully restored fishery. The study did not assess the salmon's impact on the ecosystem, or its impact on the health of the local community or the culture and wellbeing of the Elwha Tribe, which would understate the opportunity costs. To remediate these conflicts and obvious potential for restoration, the report recommended technological solutions to aid in fish migration past the two dams, such as trapping and trucking the fish upstream (Crane, 2011).

In 1975, the Washington Department of Fisheries (WDF) reached a settlement with the dam owners, agreeing not to oppose licensing of the dams, but required that the two dams be operated in a "run of the river" mode, to prevent the haphazard draining of the river seen in previous years, and providing a portion of the funding for a state run salmon hatchery downstream. The Elwha Tribe also obtained federal funds in 1976 to build and operate a hatchery on reservation lands near the mouth of the river, although the project is not considered mitigation for dam impacts (USDOI, 1994). Despite the settlement with WDF, other government agencies (including the Elwha Tribe, ONP, NOAA Fisheries Service, and USFWS) and environmental groups (Seattle Audubon, Olympic Park Associates and others) continued to oppose the licensing of the dams (Ward et al., 2008), and pushed for restoring the salmon runs to the upper watershed (Winter and Crain, 2008).

In 1975, the state began taking mitigating action at the Elwha River. Crown Zellerbach agreed to terms in the licensing settlement to fund the construction of a fish rearing channel below the Elwha Dam, in order to give the fish that had been running up against the dam a place to spawn.

At this time, the Boldt Decision was law, and fisheries management was rapidly changing to accommodate the new co-manager relationship between the state and tribes. Robert Elofson, Elwha tribe member and Elwha River Restoration Manager, points out that it was this time,

when co-manager status meant the rapid expansion of tribal fisheries management practices and development of expertise and personnel, that increased tribal governance and built the capacity the tribe needed to continue their efforts combatting the dams (Winter and Crain, 2008).

In 1976, the Elwha tribe directly inserted itself into the licensing proceedings underway and gained petitioner status for the licensing of the Elwha Dam (Busch, 2008). The Elwha tribe was the first group to do so – the NPS, under the DOI and the state Departments of Ecology and Game followed suit. Other federal and state agencies would enter the proceedings at a later date. This marked the beginning of the Elwha tribe’s participation in the management permitting decision-making process regarding the dams, the dam’s eventual removal, and the ERRP.

In 1978, the Tribe opened its hatchery on the lower Elwha River, intended to stock the river with fish to sustain tribal harvest within its usual and accustomed area, a right that had just been reaffirmed by the Boldt Decision.

In 1978, the Elwha Dam failed to pass a federally required safety inspection, thereby preventing federal expenditures for flood control, housing, or economic development on the Lower Elwha Reservation (Busch, 2008). When the U.S. Army Corps of Engineers (ACE), and the Washington Safety of Dams program failed to issue an order to fix the dam, the Elwha Tribe took over when no other government agency would act, sought an engineering consulting firm, proved FERC jurisdiction, performed a study modeling a “probable maximum flood” and dam structure failure analysis, and failure simulations (Busch, 2008). As a result, FERC issued an emergency dam safety order, requiring the repairs recommended by the Elwha tribe. Following FERC’s decision, the tribe was able to obtain ACE funding to build a flood-control levee and federally funded housing on the reservation (Busch, 2008). Following its efforts to improve dam safety, the Elwha tribe shifted their focus to improving fish passage at the dams, using \$0.5

million of annual BIA Water Resources funds to finance analyses of action alternatives; although none of the federal agencies took part in those efforts (Interview-2).

During the 1980's, the FERC licensing process became extremely contentious and drawn out, due primarily to the federal policy implications of licensing a project within a National Park (Crane, 2011), the inability to design fish and wildlife mitigation measures capable of meeting Federal, State, and Indian Tribe resource goals, and legal challenges by conservation groups (USDOJ, 1994).

Around this time, local conservationist Rick Rutz of the Olympic Park Associates, latched on to the realization that the upper dam, within the boundary of the national park, was in violation of the law. He began researching the feasibility of dam removal, and “shopped around his idea” to Seattle environmental groups (Egan, 2007).

As the Tribe studied the dams, they found that fish passage around the dams was going to be very difficult and expensive relative to the benefits to be derived from continued operation:

“We realized that [the dams] provided only half the power for one mill, and we realized that there were hundreds of thousands of salmon that the river used to produce, and they were only producing about 5000 now, about 1% of what it used to produce. The evidence started building up that indicated that this was possible to actually ask in this situation for removal of hydroelectric dams, which had never been done before. The Tribe was 100% behind dam removal all the way, as soon as the possibility of restoration and full phase out of the dams came up, it was the tribe’s top priority” (Interview-2).

Joint Committees

At this point, NMFS was the first federal agency that supported working on restoration of the river and was coordinating the tribe and all agencies in FERC proceedings (Interview-1).

In an effort to coordinate and share information, as well as to maximize their negotiating power, the interveners joined together to form two informal committees: the Joint Fish and

Wildlife Agencies (JFWA) and the Elwha Relicensing Steering Committee (ERSC) both of which continued to function throughout the proceedings and the development of the two EISs, after the passage of the Elwha Act (Egan, 2007). The JFWA was initiated by the ONP in 1985, consisting of federal and state interveners (NMFS, NPS, USFWS, WA Department of Ecology) as well as the Elwha Tribe and the Point No Point Treaty Council, with stated objectives “to speed up coordination of proposed activities and to insure that these plans are shared in a timely manner with all concerned entities (Egan, 2007, p. 115). JFWA enabled the agencies to maximize their research funds and avoid duplicated efforts. The relevant agencies coordinated research activities, with the benefit of internal review prior to dissemination. They were able to assure a level of consistency among their public statements, gain a better mutual understand to articulate their positions and differences in opinion (Egan, 2007, p. 116). Because of the 1914 contract with Crown Zellerbach (since extended to James River Corporation as contemporary owners of the dams) forbidding the dam owner from opposing relicensing of the Elwha Dam, the WDF could not formally participate in the JFWA, however it did attend most meetings (Egan, 2007). The JFWA at this time was still pushing for mitigation efforts toward salmon restoration, and not dam removal, as FERC remained strongly resistant to denying a license for the first time for environmental reasons (Crane, 2011). The ERSC was an effort to enable stakeholders who were not involved in the proceedings to participate in a forum to exchange information (Egan, 2007). The ERSC also sought the participation of the Elwha Tribe as well as Crown Zellerbach in their committee meetings.

In 1985, the ONP Superintendent Robert Chandler suggested in a letter that the NPS purchase the two dams, for their eventual removal. Around the same time, the ONP submitted a proposal calling for strong measures and private funding to restore salmon above the two dams

and emphasized the impact of the loss of salmon on the greater ecosystem (Crane, 2011). The proposal would make clear that downstream mitigation of fish passage was absolutely necessary for the upstream restoration of the Elwha River ecosystem and salmon habitat.

In January 1986, the Elwha Tribe again filed to intervene in the dam licensing proceedings for the relicensing of Glines Canyon Dam and filed a motion for the removal of both dams (Busch, 2008). All parties, including NMFS and the environmental groups who were strong allies, agreed and synchronously made the motion in the FERC proceedings for the phase out and removal of the dams (Interview-2). In February 1986, the DOI officially challenged the FERC licensing of the Glines Canyon Dam because it is located within the Olympic National Park, an explicit contradiction of the NPS mission (USDOJ, 1994), and in violation of the 1920 FPA and further legislation in 1935 that banned dams in national parks and prevented FERC from issuing licenses within their boundaries (Crane, 2011), an assertion that was supported by the General Accounting Office in 1990 (Egan, 2007). It was important for all the agencies and the Elwha tribe to align themselves with the same position in the proceedings,

“If the agencies came in with different positions, then FERC could demonstrate that there’s no consensus, and have the power to influence the decision, so Laurie Bodie, DOI attorney, got the agencies & tribes together to do a joint filing, where all parties signed; since it was a joint effort, FERC couldn’t make that case against us.” (Interview-1)

On May 15, 1986, Seattle Audubon Society, Friends of the Earth, Olympic Park Associates, and the Sierra Club filed for intervener status in the ongoing FERC proceedings (Egan, 2007), calling for the removal of both dams. The environmental groups saw an opportunity in the case of the Elwha dams to test the new Electric Consumers Protection Act (1986) (ECPA; 16 U.S.C. 803(a)), which required FERC to issue license conditions to protect and mitigate, and enhance fish and wildlife, as well as consider recommendations from state and

federal fish and wildlife agencies and affected Indian Tribes (Winter and Crain, 2008). By challenging the ECPA, they hoped to set a legal precedent for dam removal efforts elsewhere (Egan, 2007). The focus of the groups' legal involvement was to use the relicensing process to force real consideration of the salmon issues (Crane, 2011).

According to the FPA, in order to issue or renew a license, FERC must consider competing costs and benefits, and make "equal consideration" of power production, impacts to fish and wildlife and their habitat, and recreational opportunities affected by the project (Winter and Crain, 2008).

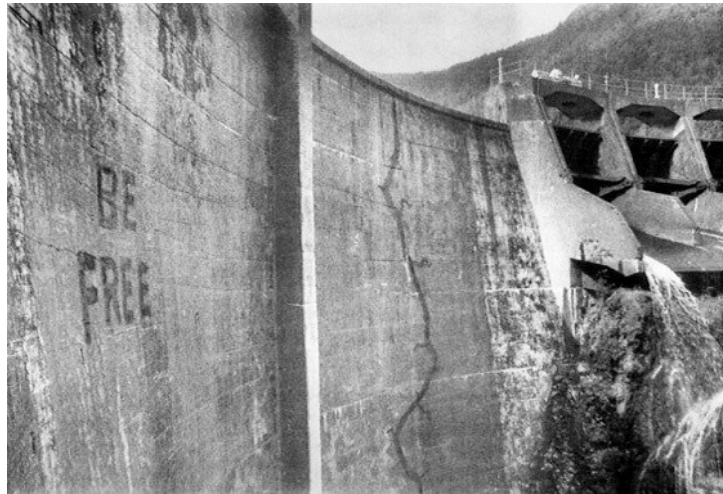


Figure 15: Environmental activism at the Glines Canyon Dam (Source: Peninsula Daily News)

The interveners asked FERC to issue a declaratory order in 1988, stating that it lacked jurisdiction to relicense the Glines Canyon dam because it is located within Olympic National Park. Although the dam had been initially licensed in 1926, prior to the formation of the ONP, at its relicensing in 1976, the land where the dam stood was a privately held inholding inside the ONP boundary. In the midst of the controversy, ownership of the dams was again passed to James River II, Inc. in 1987 (USDOJ, 1994), which participated in final negotiations leading up to the Elwha Act. James River Corporation, still hoping for a new operator license on the Elwha Dam, argued that FERC did have jurisdiction to issue a new license (Crane, 2011).

Under the requirements of NEPA, FERC initiated an EIS in 1989 for the licensing of the dams, including a cursory evaluation of the action alternative of dam removal (Winter and Crain, 2008). Throughout the initial EIS process, FERC evaluated existing information, but also asked

for additional data and analyses from various agencies and the Elwha tribe. These data and analyses, which now constitute a multitude of reports, were used to justify the case for dam removal and later the Elwha Act. The data gathered for these analyses painted a clear picture that the costs of mitigating the dam's impacts on salmon and other resources would be prohibitive, and even the dam owners then shifted and began supporting the idea of dam removal (Crane, 2011). Daishowa, who owned the Port Angeles pulp and paper mill where the Elwha River dams power was sent, also became concerned over costs and mitigation responsibilities, wanting its prior investments in dam improvements to compensate for existing mitigation requirements (at \$64 million), and protection from liability for future watershed or fisheries damage (Crane, 2011). These concerns brought both the dam operator and pulp mill to the table, arguing in favor of a legislative solution. Their position was further strengthened by concern over the 400 jobs provided by the Daishowa pulp and paper mill. This was taking place during the Spotted Owl controversy in the Pacific Northwest (Crane, 2011), when opposition to expanded environmental protections was at its highest, and debates were often pitted as environment vs. jobs. In rural communities, resource extraction was the foundation of personal livelihoods; this was especially the case in Port Angeles and the town came out in strong support for the mill jobs.

Environmentalists and fishermen built media and public outreach campaigns around the Elwha River's legendary salmon runs, and revived the past century's early American monumentalism and fascination with the Wild West, and grandiose symbolism of the Olympic Peninsula. These strategies would not work by themselves to surmount the political hurdles that still kept the two dams firmly blocking the Elwha River. While blocking relicensing appeared to be the straightforward action that would clear the way for river restoration, it could also be interpreted as a regulatory taking, impacting the 400 livelihoods provided by the mill jobs, The

potential for endless lawsuits delaying a ruling on river restoration demanded a more pragmatic solution. “[L]eaders of the restoration movement realized that arguments for restoration of the river had to appeal to more than aesthetic nationalism and ecological preservation if they hoped to achieve a consensus of support for dam removal in a rural community. They needed to make sense ecologically, economically, and, finally and most problematically, politically” (Crane, 2011, p. 145). A pragmatic and strategic approach would be required in order to overcome the intransigent FERC.

Treaty Rights on the Elwha

The Lower Elwha Klallam Tribe had a compelling and real argument for the restoration of the River fisheries. When all of the technical assessments and cost/benefit analysis were being undertaken, the tribe had further impetus for their dogged resistance and began emphasizing the rights guaranteed to them in the Point No Point Treaty, and recently re-affirmed with the Boldt Decision. “Fisheries manager and tribal member Rachel Kowalski recall[ed] her grandmother speaking of the river teeming with fish. And as Kowalski state[d], “It’s not just a matter of dollars and cents for us...the loss is ever present” (Crane, 2011, p. 138). At this stage, Phase II of the Boldt Decision had not yet been ruled, and western Washington tribes were pressing for legal arguments to adjudicate the habitat protection clause. The Elwha made for a timely and high profile case. Beneath the technical arguments for salmon restoration, the Elwha tribe had lost their traditional access to fish in their U&A. Although already on shaky legal ground since the Elwha Dam was constructed, the subsequent decimation of Elwha River salmon, and relicensing of the dams would be an overt violation of the tribe’s treaty rights. Thomas Jensen, the majority council to the Senate Committee on Energy and Natural Resources, the Sub-Committee on Water

and Power of Congress, noted that after Boldt, and in the midst of the FERC relicensing proceedings, there was a convergence of issues: that the Elwha “was one of those examples of a Tribe so unmistakably dispossessed of something that a treaty from the federal government had promised them...And here they converge: Federal hydropower licensing under the ECPA was required, that FERC was required to grant very substantial deference to the conditions; to honor the conditions of a license required by the Secretary of the Interior, including those required to fulfill treaty rights. And... there they are together squarely on the Elwha” (Egan, 2007, p. 149).

The possibility of litigation at the federal level (after the long and intense legal battle that had just ended in the Boldt Decision) provided the Elwha tribe with strong leverage in its endeavors to restore the river and fueled efforts to remove the dams through other means (Crane, 2011). In a letter to Governor Booth Gardner, the Elwha Tribal Council expressed the economic and cultural benefits present in the river citing the tribe’s study that found a restored Elwha River could bring as much as \$150 million to tribe over a period of 50 years (Crane, 2011).

Politics at the Elwha

In 1989, Congressman John Dingell, then Chairman of the Congressional Subcommittee on Oversight and Investigations to the Committee of Energy and Commerce, wrote a handful of strongly worded letters outlining a series of questions and actions his committee would take to obtain answers regarding the situation on the Elwha River. In a letter to Representative Al Swift (D-WA), of Washington’s second Congressional District, he described his meetings with local stakeholders, including the Elwha Tribal Council, and his judgment that the Elwha fisheries had been poorly managed for too long, saying it would be impossible for him to support any legislation that did not require substantially more information and understanding of the impacts

and consequences of the Elwha River dams (Crane, 2011). In a letter to the SOI Manuel Lujan, Jr. and FERC chairman Martha Hesse, Dingell notified of his role in the proceeding legislation (leading to the Elwha Act), his concern over dam safety and their fishery impacts, his worries over who would pay for restoration, and strongly critiqued FERC's "foot-dragging, finger-pointing, and unreasonable delay preventing a reasonable solution" (Crane, 2011, p. 149) with a long list of pointed questions regarding FERC's position and plans concerning their congressionally mandated requirements for balanced analysis of their decisions. A letter to Charles A. Bowsher, the comptroller general of the GAO, questioned the justification for the dams that were providing partial power to one mill in Port Angeles. He instructed Bowsher to address, in 90 to 120 days, the legal issues regarding dam removal, a history of the Elwha River and its people, impacts of the dams on the Elwha Tribe, and on local employment, the designation of who would be responsible for restoration of the fisheries, the jurisdictional status of the FERC regarding each of the Elwha dams, and whether the FERC could force dam owners to mitigate for damage to fisheries (Crane, 2011).

Senator Brock Adams wanted to champion a major piece of legislation to benefit the State of Washington before he left office, and took to the Elwha Act to be his legacy (Crane, 2011). He knew there would be great political resistance in Congress and so set out to navigate key relationships and negotiate to gain the bill's support. Representative Swift helped the Elwha Act clear the Commerce Committee and reach the House floor for a vote. Senator Bill Bradley (D-NJ), chair of the Subcommittee on Water and Power of the Senate Committee on Energy and Natural Resources, had memories of past vacations to the Olympic Peninsula, and time spent at the Elwha River, and held great interest in sponsoring the [Elwha Act]. Adams also wanted Senator Slade Gorton to co-sponsor the bill (as attorney general for WA, Gorton had defended

the state against the Nisqually Tribe in a case that would later lead to the Boldt Decision, and held a reputation for opposing any legislation, program, or intervention that protected or advanced tribal treaty rights and sovereignty (Egan, 2007). Gorton was initially skeptical and resistant, but did agree to co-sponsor the bill, a position that would later change. Representative Norm Dicks (D-WA) was also instrumental in the early negotiations for the Elwha bill, and testified in both the House and Senate in its support. He was on the House Appropriations committee and stood to influence the eventual funding of the project once the bill was passed.

In response to the legal challenges from federal agencies, conservation groups, and the Tribe, FERC determined in 1990 that it *did* have jurisdiction over the Glines Canyon Dam. This position was subsequently challenged in court (USDOJ, 1994). “Continued attempts to resolve FERC licensing issues were certain to result in protracted litigation, and considerable delay and expense for all parties, including the federal government. Failure to reach consensus on these issues would lead to the courts deciding vital issues without the opportunity for rational compromise; verdicts would be narrowly defined by the issues taken before the courts, resulting in a piecemeal approach to the problem when a comprehensive solution was needed” (Busch, 2008, p. 15).

The rhetoric and political maneuvering were rapidly escalating as the interveners sought a way to build more community support behind dam removal. Congressman Swift supported the idea of a consensus-based, “creative solution” to remove the controversy between community resource users, and move away from the polarizing environment vs. jobs debate. He began searching for ways to remove the Daishowa mill’s reliance on Elwha River power in order to prevent its closing if the dams were not licensed to operate. Brian Winter, Elwha Restoration Project Manager for the NPS, expressed the agencies’ concern over losing the mill, “I remember

from the beginning, all the agencies were in agreement that jobs at the mill were critical. Regardless of where we ended up, jobs had to be protected” (Egan, 2007, p. 151). This turned out to be a relatively straightforward solution, as the Bonneville Power Administration (BPA) could provide power to the mill. This provision of power involved intense negotiations between Congressmen, the BPA, Daishowa, the BLM, and the agencies, and eventually was provided at no additional cost. The real challenges at the Elwha River and in Port Angeles kept the political debate in Washington D.C. in perspective. Jensen, and Michael Weland, from Senator Adams’ office, who crafted the Elwha Act were quoted, ““It was always the Mill and the tribe. It was the people on the Peninsula’ who needed to be protected as the dam removal option was placed on the table for Congressional consideration” (Egan, 2007, p. 151), enabling the bipartisan support needed to pass the bill. The finding of an additional power source for the Port Angeles mill came at the same time as a GAO legal opinion confirming the interveners’ position that FERC *could not* license the Glines Canyon Dam inside the ONP, and furthermore it did have the authority to purchase and take over the operation of the dams, and subsequently order their removal (GAO, 1991).

The Elwha Tribe was equally adept at navigating the political field in both Port Angeles and Washington D.C. Their strategy remained absolute – they would fight for dam removal, with no exceptions. By negotiating compromises on other matters that were likely to be included in the legislation, they kept their primary goal in the forefront during the Elwha Act negotiations with congressional staff (Egan, 2007). “Lyndee Wells, an attorney for [the Tribe] during the Elwha Act negotiations, summarized the tribe’s position:

We tried to focus on ‘Okay, what is the priority of things that are most important to us?’ And over time we would get kind of distracted by being angry about this kind of heavy-handed abuse of the Tribe [by the City of Port Angeles and Senator Gorton]...Coming

out of Gorton's office, we had to kind of take deep breath and say, 'Okay, what is our priority? And if our priority is getting these dams removed then...we have to compromise'" (Egan, 2007, p. 155).

In doing so, the Elwha Tribe gave up its hope of reestablishing tribal use of Ediz Hook with a cultural visitor center to memorialize and maintain its traditional seasonal practice, where they had occupied the land for at least 800 years prior to the City of Port Angeles (Egan, 2007). The City demanded a new lease for Ediz Hook, adamant that it had plans for developing those lands. On another occasion, the tribe had been given a \$20 million estimate in housing compensation for the funding delays due to the instability of the Elwha Dam and its increases flood risk, which Senator Gorton later reduced to \$4 million, saying the money simply was not warranted (Egan, 2007). The City of Port Angeles also negotiated a provision into the Elwha Act to protect the city's water supply during dam removal, which evolved into an entirely new water system funded with EPA and NPS funds. An informal agreement was reached for the City's sewer system to be connected to Elwha Tribal households, but the City later took back its offer, stating funding constraints.

In 1991, the Justice Department, representing the agencies, Tribe, and conservation groups, filed Petitions for Review of the FERC decisions with the Ninth Circuit Court of Appeals. This appeal was strategic in that any potential outcome of an Appellate Court ruling would be time consuming, costly, and contentious between the many interveners across federal agencies and local governments and organizations. The threat of this undesirable and prolonged battle was the threshold that then drove the formal consideration of other alternatives for the dams' fate.

In the end, no licensing decision was made before Congress enacted a legislative settlement of the issue (USDOJ, 1994). In the end, the Ninth Circuit appeal was never heard.

THE ELWHA ACT: A LEGISLATIVE SOLUTION

The Elwha Tribe joined with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service in advocating for restoration of the river's anadromous fisheries in FERC's licensing process (Busch 2008). The Tribe was the first of those parties to move for the dams' removal. The federal partners followed suit, and together, they completed the necessary scientific studies and were key players in the negotiations that led to the Elwha River Ecosystem and Fisheries Restoration Act (1992) (Elwha Act (PL 102-495) (Busch 2008), explicitly requiring the full restoration of the Elwha River ecosystem and fisheries by authorizing the SOI to remove both dams (Winter and Crain, 2008). In the year leading up to its passage, the parties collaboratively put the legislative language together and all came to agreement that what ended up in the Act it was acceptable (Interview-2).

Despite years of negotiations and maneuvering, politics nearly got in the way in the final hour before the Elwha Act would be passed. Senator Dingell used the opportunity to hold the bill hostage for the benefit of other important bills before the Energy Committee, only relinquishing it after an intense private meeting with Representative Swift (Egan, 2007). Late the night before the vote, lobbyists for Rayonier Pulp and Paper showed up at Representative Dicks' office to contact other Congressional members to interfere with the bill, though they had not participated in any negotiations prior to that date. Finally, however, in the middle of the night the Elwha Act was passed as the last bill of the 1992 Congressional session.

Signed into law as Public Law 102-495 by President George H.W. Bush on October 24, 1992, the Elwha Act states an explicit mission: *To restore the Elwha River Ecosystem and its native anadromous fisheries* (U.S. Congress, 1992).

The Act represented a negotiated solution that provided an avenue to negate lengthy and costly litigation, support economic development for the Lower Elwha Klallam Tribe, restore a national park ecosystem and native anadromous fisheries and promote tribal fisheries and the Federal trust responsibility to affected Indian Tribes (Busch 2008). It also permanently removed FERC's authority to issue a dam operating license at either project on the Elwha River (Winter and Crain, 2008). The legislation also stipulates that the lands associated with the Elwha and Glines Canyon projects, be transferred "to the Elwha Tribe in trust for tribal housing, cultural or economic development purposes" (U.S. Congress, 1992).

This legislative victory was just the beginning of the co-management process between the Elwha Tribe and federal partners toward the planning and implementation of the ensuing Elwha River Restoration Project. Outlined in the subsequent EIS, the specific problems posed by the Elwha River dams that the SOI intended to address by implementing the congressional mandate in the Elwha Act included:

- Blocked native anadromous fish passage to the majority of the Elwha River and tributaries
- Trapped sediments and woody debris which are critical components of anadromous fish habitat and which maintain the Elwha River estuary
- Limited nutrients important to the aquatic and terrestrial food chain of the Elwha River valley
- Heightened water temperatures, resulting in higher incidence of diseased or physiologically stressed fish
- Inundated important riverine and terrestrial habitat
- Inundated lands and sites of cultural and religious significance to the Lower Elwha S'Klallam Tribe
- Glines Canyon Dam is within the boundary of Olympic National Park, but in conflict with park policy to restore fisheries and aquatic habitat to their natural states
- Beach erosion on the Elwha Reservation and east to Ediz Hook
- Inconsistencies with the federal trust responsibility to four affected Indian tribes

Though the Elwha Act was described as a way of avoiding a piecemeal approach to the problem, it did not provide the funding to perform such a comprehensive undertaking, instead authorizing expenditures through the Assistant Secretary of Fish, Wildlife, and Parks, and the NMFS (Busch, 2008). The funds were slowly accumulated through annual NPS budget appropriations and earmarks via the work of Washington State's congressional representatives championing the cause. This took over two decades. The effects of Senator Gorton's work against Elwha Dam removal continued to be felt, as he threw in language in the Elwha Act that made it nearly impossible to access departments that have large construction budgets, like the U.S. Bureau of Reclamation (USBR), as compared to the NPS and Department of Commerce. An Elwha Tribe staff person reflected on the negotiation solution and the Tribe's commitment to its bottom line of dam removal, "The law was written the way it was written, and again, that's part of those give and takes, do you either want the law passed or do you not want it passed?" (Interview-3).

In 2007, the funding had only been obtained to acquire the dams, perform extensive environmental analysis, and award contracts for new water utility facilities for the City of Port Angeles; the Elwha Tribe's lawyer commented on the progress, that "Ironically, Congress forced funding to be segmented to such an extent that today the Tribe is sure of only this: the City of Port Angeles, long an opponent of dam removal, is getting new water works costing taxpayers about \$94 million, and the United States owns two fish-killing dams" (Busch, 2008).

THE ELWHA RIVER ECOSYSTEM RESTORATION PROJECT

The Elwha Restoration Project's massive scope and scale incorporated many cooperating federal and state agencies, local governments, non-profits, and citizen groups, with the SOI as the final decision maker. The cooperative agencies who participated in the initial phases of

planning included U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. BIA, U.S. Army Corps of Engineers, and the Lower Elwha S’Klallam Tribe. The JFWA continued to meet throughout this time, providing technical discussions on restoration planning and coordinating resources, as well as the ERSC, which kept stakeholders abreast of planning progress and provided a venue where community concerns were raised. A citizens action group would later take action in an effort to build social capital and influence the political stalemating taking place in Washington D.C. in order to keep project funding acquisition progressing.

The ERRP presents a unique case where the Elwha Tribe is both consulting entity and the user group most impacted by both the project’s ecological and cultural impacts. It is important to recognize that for the Elwha Tribe, the scientific aspects of the project cannot be removed from the cultural/social analysis, as the Tribe’s culture is so closely linked to the Elwha River’s ecological success, as shown in the Elwha tribe’s natural resources management mission:

“[To] Assist the Tribe to protect, enhance, & restore land, air, and water resources, and environmental health for generations to come. Promote the protection of cultural resources, unique tribal interests and treaty rights. Serve the tribal community and promote sustainable community development.” (Lower Elwha Klallam Tribe, Natural Resources, 2012)

THE ELWHA REPORT

In 1994, the DOI subsequently published the Elwha Report, a request of Congress upon passage of the Elwha Act (USDOJ, 1994). The report found that full restoration could only be achieved through the removal of both dams (Ward et al., 2008). It also included action alternatives recommended for the subsequent EIS process, including: 1) No action; 2) Removal of the Elwha Dam with retention of the Glines Canyon Dam; 3) Removal of the Glines Canyon Dam with retention of the Elwha Dam; and 4) Removal of both dams. The report also suggested

options for the disposition of project lands once the dams were removed and the reservoirs subsided. The lands within the boundary of the ONP would be managed by the NPS. It was suggested that other lands associated with the Elwha Dam be managed as trust lands by the Elwha Tribe or the State of Washington (USDOJ, 1994).

The Elwha Report states that restoration of the river ecosystem and its fisheries is of paramount importance, both culturally and economically, and that the Tribe fully supports the management of the project lands in order to protect the natural resources, via a yet undetermined conservation or refuge area to ensure its perpetual preservation (USDOJ, 1994). The DOI explicitly acknowledges the role the Tribe has played in dam licensing proceedings, and negotiations among local stakeholders regarding the future of the Elwha River, which were included as provisions in the Elwha Act (USDOJ, 1994):

“Dam removal and acquisition of project lands by the United States in trust for the Tribe would dramatically improve the Tribe’s ability to develop a strong economic and cultural presence, and to provide community, stability, and opportunities for education and employment to all members. It represents an opportunity to enlarge the tribal land base, meet the needs of tribal members and ensure stewardship and restoration of the Elwha River, upon which the Tribe is traditionally and culturally dependent.” (USDOJ, 1994, p. 174)

Six hundred acres of the project lands located within the river corridor are to be protected. The Elwha Report suggests a cooperative venture to manage these lands with the DOI in order to share resources. Refuge lands usage would agree with the Tribe’s criteria, including hiking, hunting, fishing, and gathering of traditional cultural resources, including cedar trees, wild plants, and secondary forest products (USDOJ, 1994). The tribe proposed land uses that would meet long-term objectives for residential and economic development to the benefit of the Tribe and surrounding community, as well as to avoid adversely affecting restoration activities. A portion of the project lands would be designated for tribal housing, where suitable, and those

adjacent to Highway 1, would be zoned for economic development, geared toward recreational and educational opportunities around the river system provided by the restoration project (USDOI, 1994).

The Elwha Report outlines that a watershed-based approach, along with cooperative management, would be required for effective restoration and sound management of the Elwha River ecosystem and fisheries. At that time, cooperative planning efforts were in a formative stage (USDOI, 1994). The Elwha Tribe explicitly states its intentions to participate in these collaborative processes, laying a foundation of formalized relationship with project partners, and moving forward beyond the contentious stage of negotiations that had occurred prior to the Elwha Act's passage: "It is the intention of the Lower Elwha S'Klallam Tribe to participate in County and City planning efforts, to encourage cooperative planning wherever possible, to facilitate consistent management plans across jurisdictional boundaries, and to ensure protection of the area's natural and human resources" (USDOI, 1994, p. 179).

Furthermore, the Elwha Report stipulates that "implementation of project plans must occur in such a manner that both the quality and quantity of future development comply with Tribal policies and environmental limitations... to promote the long-term quality of the project land's physical, social, and economic environment" (USDOI, 1994, p. 179), and a framework would be established to ensure that implementation of project programs achieve the Tribe's land use objectives and policies.

The Elwha Report laid the foundation for the environmental and social assessments that would follow, as well as the DOI's position and tone, in addressing the Elwha Tribe as a project partner. Importantly, it outlined the current land uses around the project site, and listed potential impacts to those sites and their use, as well as suggested mitigations. The report recognizes that

the Tribe espouses environmental stewardship in its management philosophy, as well as interagency coordination, and active participation in ecosystem restoration (USDOI, 1994). Once project implementation started under the SOI, the partnership between the NPS and the Elwha Tribe expanded (Interview-1).

Much of the Elwha Report information was based upon prior scientific analyses performed by the Elwha Tribe in their pre-trial efforts; once that funding ran out, the partners switched to the EIS process for the ERRP, and funding acquired through the DOI upon the passage of the Elwha Act (Interview-1). But new information was also needed, and subsequently developed by federal and state partners, and the Elwha Tribe, in technical reports and three EISs (Winter and Crain, 2008).

ENVIRONMENTAL IMPACT STATEMENT PROCESS

The SOI authorized the NPS as the lead agency in EIS preparation to analyze the proposed action alternatives to fulfill the Elwha Act's mission. The NPS established a "NEPA core team," which consisted of around 30 people, including the Elwha Tribe staff, who had the expertise at this stage, and specific interest, the NPS, and USBR, ACE with expertise in flood control, and independent contractors who either the NPS or tribe had hired, including the engineer who did the original dam removal scope, and reviewed the NPS's plans for the Tribe, as well as a tribal economist who lead the economics team (Interview-1).

The tribe led the economic analysis for the EIS, because they were the entity most heavily impacted by the project, and was a major partner in the development of the fisheries analysis as well (Interview-1). "All decisions rested with the SOI, as stipulated in The Elwha

Act, but it was surprisingly easy to reach consensus on what those decisions were and then make those recommendations to the Secretary” (Interview-1).

The recommended alternative was the proposed alternative: the decommissioning and removal of both dams. The recommended action alternative is the only action that would uphold the U.S. federal government’s trust responsibility, is consistent with stated park policies and management efforts, and achieves the primary and absolute goal of ecosystem restoration, as shown in Table 5 (USDOJ/NPS, 1995). In total, three EISs were prepared over a ten-year period:

- The Elwha River Ecosystem Restoration: Programmatic EIS (PEIS) (USDOJ/NPS, 1995)
- The Elwha River Ecosystem Restoration Implementation: Final EIS (FEIS) (USDOJ/NPS, 1996)
- The Elwha River Ecosystem Restoration Implementation: Supplement to the FEIS (SEIS) (USDOJ/NPS and EPA, 2005)

Since the initial PEIS, multiple reports and analyses were compiled assessing both the ecological and social impacts of the proposed project. Those findings, including the NOAA Biological Opinion resulting from the interim Endangered Species listing of Chinook salmon, and responses to comments following the public comment period for the two EISs, were addressed and compiled in an updated SEIS (2005) for the Elwha River Restoration Project. The FEIS examined how best to remove the dams “in a safe, environmentally sound, and cost-effective manner and implementing fisheries and ecosystem restoration planning” (USDOJ/NPS, 1996), and projected that dam removal would be completed over a two year period. The SEIS acts as a comprehensive document that outlines each facet of the proposed dam removal and assesses its associated impacts.

Table 5: Social Impacts of Proposed Action Alternatives Pursuant to the Elwha Act

	Alternatives				Proposed Action
	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	
Land Use, Esthetics and Recreation					
Land Use					
Olympic National Park	Conflicts with park policy	Conflicts with park policy	Elwha Dam somewhat inconsistent with park policy	Glines Dam conflicts with park policy	Consistent with park policy
Puget Sound Salmon Mgmt. Plan	Inconsistent with plan	Largely inconsistent with plan	Largely inconsistent with plan	Largely inconsistent with plan	Fully consistent with plan
Clallam County Comprehensive Plan	Inconsistent with plan	Largely inconsistent with plan	Largely inconsistent with plan	Largely inconsistent with plan	Fully consistent with plan
Esthetics					
Views	Lake views	Lake views	River and lake view	River and lake view	River view
Recreation					
Park Recreation	Lake oriented	Lake oriented	River and lake oriented	River and lake oriented	River oriented
Fishing	Only resident fish above dam	Anadromous fish increase, fewer residential trout	Anadromous fish increase, fewer residential trout	Anadromous fish increase, fewer residential trout	Full restoration of native anadromous fish, resident trout decrease
Cultural					
Tribal	Tribal river focus lost	Tribal river focus lost	Tribal river focus partially restored	Tribal river focus partially restored	Tribal river focus fully restored
Cultural Properties	Inundated and inaccessible	Inundated and inaccessible	Inundated and inaccessible	Some uncovered and accessible	Most uncovered and accessible
Historic Structures	Historic structures unmodified, on National Register	Dams modified, but eligibility for Register unaffected	One dam removed and other modified but eligible for Register	One dam removed and other modified but eligible for Register	Both dams removed but fully inventoried, loss of historic structures
Socioeconomics					
Annual fisheries benefits	\$0.84M	\$1.1M	\$2M	\$1.6M	\$3.5M

Adapted from USDOJ/NPS, 1995: Table 1: Impact Summary Chart

ERRP GOALS AND OBJECTIVES

The recommended action was selected based on the opportunities it presented to achieve the DOI's two major objectives, set out in the Elwha Act (USDOI/NPS, 1995):

1. Fully restore all runs of Elwha River native anadromous fish
2. Restore the Elwha River ecosystem.

Dam removal and the subsequent return of the native anadromous fishery would provide economic and cultural benefits to the Elwha Tribe and Clallam County; and restore the Elwha River valley ecosystem's natural biological and physical processes; it is the only action that is consistent with the federal trust responsibility to the affected Indian tribes, or would substantially reduce material and cultural damages suffered by the Elwha Tribe as a result of the dams (USDOI/NPS, 1995).

Potential Social and Cultural Benefits of the ERRP

The NPS states that the Elwha Tribe's culture would immensely benefit from the restoration project, "the free-flowing Elwha and its native salmon fisheries are central to the culture of the Lower Elwha S'Klallam Tribe. Benefits to the tribe would increase in direct proportion to the degree of restoration of the river and native fisheries" (USDOI/NPS, 1995). The potential impacts of dam removal on Lower Elwha Klallam culture were, and still are, to some degree unknown, as many of the cultural sustainability impacts will not be felt for some time. Dam removal would provide short-term economic impetus for recovery due to the participation in the construction project, and additions to business revenue, personal income, and local tax revenue from recreation and tourism (USDOI, 1994). The re-establishment of the anadromous fisheries would return a traditional economic and cultural element to the tribe, by which the Elwha Tribe would benefit from long-term restoration of ceremonial, subsistence, and

commercial fishing, as well as economic benefits from sport fishing (USDOJ, 1995). Traditional sites would again be accessible on the river, and shellfish habitat at the mouth of the river would be replenished providing access to traditional harvesting practices, and the mitigation of overcrowding at the river mouth (USDOJ, 1994). The restoration of the Elwha River and its fisheries has the potential to benefit both material and cultural well-being through the return of the free-flowing river and the revitalization of the S’Klallam culture (USDOJ, 1994). Table 6 lists the estimated economic benefits of river restoration at the Elwha. A separate Klallam economic analysis indicated river restoration could benefit the tribe as much as \$150 million over 50 years (Crane, 2011).

Table 6: Summary of Net Present Value of Elwha River Restoration Market Benefits Over Project Life (3% Discount Rate)

Category	Market Benefits of Removing Both Dams (million \$2001)
Commercial Fishing (tribal and non-tribal)	36.7
Sportfishing Business	10.3
Ediz Hook	1
Recreation/Tourism	317.6
Total	355.3*

* Excludes sportfishing business net revenue to avoid double counting
USDOJ/NPS & EPA, 2005

At this stage in the project, as the partners begin transitioning past the dam removal phase and into restoration, 1100 acres of project lands, newly exposed after the draining of the Lake Aldwell reservoirs will be put in trust for the Elwha Tribe (Interview-2). This area must be kept in a publically accessible natural state, but also provides opportunities for economic development, and public outreach to increase tourism and recreation in the area, as well as potential tribal housing sites. Most importantly, this area will be utilized to restore the Tribe’s fishing traditions and fishing rights in their Usual and Accustomed area:

“We don’t see any reason why the river can’t be brought back to its historically productive levels. The only thing that would prevent us from taking good advantage of that would be interceptions in the ocean fisheries, so it could reach a point where we don’t see the maximum returns, but we expect to take tens of thousands of fish a year, and that’s going to be beneficial.” (Interview-2)

The Elwha Report highlights Section 106 of the National Historic Preservation Act, which provides a means by which federal agencies can evaluate the effects of a proposed action on cultural, archeological, or historical places. However, Section 106 does not ensure the preservation of such assets in perpetuity, or provide a mechanism to evaluate the significance of natural areas as cultural resources (USDOJ, 1994).

The great amount of interest surrounding the Elwha River dam removal demanded much consideration for the outreach and educational efforts the project managers would implement to engage the public both locally, across the country, and the world. The Elwha Report initiated these efforts by recommending multiple actions by the managing agencies and governments, including an interagency educational information center, with covered shelters at each dam site, and hiking trails between the mouth of the river and the dam locations (USDOJ, 1994). The inclusion of cultural interpretive sites associated with the construction and removal of the dams was also emphasized. “Interpretive program that help foster cultural awareness among visitors to the area, tribal members and other local residents would also help to increase recognition of the river’s worth on a holistic level” (Elwha Report, 1994, p. 208).

FUNDING THE ERRP

Despite the stated intent of the Elwha Act to be a negotiated agreement to avoid a piecemeal approach, the legislation did not ensure funding for the project, resulting in a contentious battle to determine who would foot the bill for the largest dam removal project in the

world. The Elwha Act authorized funding “for expenditure through the Assistant Secretary for Fish, Wildlife, and Parks, and...for expenditure through the National Marine Fisheries Service” (U.S. Congress, 1992). The PEIS estimated in 1994 that the proposed action would cost between \$75-100 million, including the \$29.5 million for acquisition of the dams (USDOJ/NPS, 1995). Neither agency had budgets with room for the large expenditures needed. Because the agencies could only control their own budgets but could not lobby Congress for funding, the tribe took the cause to Washington D.C. and lobbied for specific amounts to be appropriated through the BIA and other agencies (Interview-1). “But, there were many obstacles thrown in the process by Sen. Slade Gorton in the wording of the Elwha Act. All we could do from an agency standpoint was brief Congressional offices on the project’s status” (Interview-1).

President Clinton took office in 1993 and appointed Bruce Babbitt the SOI, who made dam removal throughout the United States his pet project (Egan, 2007). Babbitt’s radical views sparked a debate in Congress, which Gorton seized upon in his attempts to attach multiple riders to the Elwha Act to constrain its implementation, touting the project as a bad precedent for the rest of the country.

In the post-election analysis in 1994, in which Congressman Dicks reclaimed his congressional seat, he and Senator Gorton interpreted Dick’s loss of Clallam County votes as being due to voter disapproval of their support of the Elwha Dam removals. Immediately, both began retreating from their previous statements of support for the project. Just before the release of the Draft PEIS, Gorton stated, “that he did not feel that dam removal would be’ the most cost effective means of restoration salmon runs throughout the region” (Egan, 2007, p. 168). In 1994, Gorton introduced an amendment to the Elwha Act, placing a deadline on the mandatory funding acquisition required to proceed with the project. If the designated funds were not

secured, the project would be stopped, and FERC would then be directed to issue licenses for the dams, with the enhancement of fish passage provisions (Egan, 2007). He further authorized the use of \$25 million for fish enhancement projects, from the same \$29.5 million that had been earmarked for dam acquisition. Other community groups joined Gorton's cause, calling for the preservation of the reservoir lakes for their recreational value, and demanded a revisit of the action alternatives, despite the fact that the "no removal alternative" had been thoroughly analyzed and rejected in the PEIS (Egan, 2007).

As the battle was fought in D.C., local activists sought to realign Representative Dicks and demonstrate that dam removal was a priority for the community around Port Angeles. A Citizen Advisory Group () was formed in 1996, intent on resolving the continuing arguments among stakeholders and played an important role by mobilizing support for funding in the WA congressional delegation and diffusing the conflicts led by Senator Gorton (Egan, 2007).

Overcoming the barriers to implement co-management requires presence of the of the necessary components in a collaborative effort to combat the privatization of resources, which alters access to the resource and places it in the hands of private owners who do not necessarily have any commitment or attachments to a particular area (Pinkerton, 1999). A key driver in privatization is the defunding and downsizing of government, which Gorton's repeated attempts at handcuffing the federal agencies, i.e., by preventing appropriations for the project, and giving higher preference to the needs of the paper mill and private business interest in Port Angeles. Pinkerton (1999) argues that these breakthroughs are made possible by building institutional capacity for alternative solutions, by:

- 1) Resolving conflicts and building partnerships at the local level: the breakthroughs in conflict resolution occur through regionally or locally facilitated processes, facilitating a

- turning point in people's attitudes, when they stop seeing their relationship with aboriginal people as adversarial but as "we." And build a new level of trust;
- 2) Contributing precious social capital to management efforts: "The products of the agreements are valuable, and the agreements themselves are a precious resource, conceptualized by some scholars as social capital (Ostrom, 1990);
 - 3) Building and building upon a stewardship ethic: Conservation initiatives must emerge from the local and regional level, supported by local stewardship values and attitudes. Although institutions at higher levels are important, they cannot be effective without values, attitudes, and institutional structures supporting conservation operating at the local level, where human behavior has the greatest impact on the resource (direct quote/page?).

The CAG established by local leaders during the highly contentious time between the passage of The Elwha Act and the actual acquisition of the dams, proved to be a productive exercise in deliberate democracy, and an "antidote" to the political tactics at the time. Many described it as a "cathartic experience," enabling community to voice opinions in a forum that had not been open to them previously (Egan, 2007). The meetings were held privately, and included members of all stakeholder groups, federal and state managers, and the Elwha Tribe, to revisit each aspect of the FERC proceedings and EIS process. "This enabled the Committee to craft a report and recommendations [in 1996] that provided "something for everyone." While few agreed wholeheartedly with the Report's recommendations [which generally favored dam removal], most believed that the CAG had brought the community to a point of acceptance" (Egan, 2007, p. 194). The report made comprehensive recommendations and outlined a complex long-term iterative process for river restoration that did not please each of the CAG's participants, but did represent their bottom-line commitment to river restoration, and stewardship of their beloved Elwha River ecosystem.

The alignment of the local government and public community at this time, attributed to the work of the CAG, while the Elwha Tribe was exerting its treaty rights by lobbying Washington D.C., produced social capital that initiated a major transition in the political

environment regarding Elwha dam removal. There were a lot of people in Port Angeles who were against dam removal at the time, recalled an Elwha Tribe staff person, “A lot of people didn’t have the information to make a fair decision. With education, it changed from a hostile social environment against the Tribe - very us versus them - to an understanding of the goal and outcomes, that it wasn’t just for the benefit of the Tribe, this was for the benefit of the whole state of Washington” (Interview-3).

After meeting with stakeholders from all sides of the debate and holding community meetings where disenfranchisement was expressed from many members of the community, the CAG reported many negative lingering perceptions about the whole process. The following are a selection of those perceptions most relevant to the Elwha tribe’s participation:

- The dam owners had been allowed to skip out on their responsibilities for dam removal, leaving the federal government and taxpayers to pick up the tab
- The dam owners have escaped liability for the damage caused to the Lower Elwha Klallam Tribal fishery assets and to the Elwha tribal beaches and shellfish
- The Elwha Tribe will benefit from dam removal, but the improvement of the fisheries will accrue only to tribal members, not to local sport fishermen
- The City of Port Angeles has used the Elwha Act to push forward its own economic development agenda, with little regard for tribal cultural heritage and the inherent fairness of dam removal
- The Elwha Act was pulled off by a bunch of non-local environmental groups with no real interest in the Peninsula or the people who live there
- The NPS used the Elwha Act as a mechanism to circumvent the State and the City of Port Angeles in forcing dam removal upon the community and catering to the Elwha Tribe (Egan, 2007).

The CAG report’s conclusions and recommendations are shown in Appendix B was well-received, except by Gorton, who offered more proposals for ways to change the Elwha Act, and was accused of holding the Elwha dams hostage (Egan, 2007), by linking it with legislative actions related to other dam removal debates on the Columbia River and elsewhere. As the community worked through its differences, Gorton was forced to withdraw his opposition in

facing re-election, which he lost to Maria Cantwell in 2000. Shortly after the CAG report was submitted, Senator Gorton temporarily warmed to the idea, and President Clinton earmarked nearly \$100 million to the project over the next two years (Crane, 2011). Though Gorton would continue to block later earmarks, and it was another 12 years before project financing was complete, the CAG served to unite much of the Port Angeles community, whose voice may have spoke most clearly when they did not vote to return Gorton to office in the 2000 election. On Feb 11, 2000, the agreement to acquire the dams was signed by all parties. The Elwha Act spelled out the process for the NPS to negotiate directly with the dam owners to purchase the dams (Interview-1). As of 2007, the Park service had managed to accumulate sufficient yearly appropriations to acquire the dams, pay for the lengthy review and project design process, as well as improvements to the City of Port Angeles' water works facilities (Busch 2008).

COOPERATIVE GOVERNMENT-TO-GOVERNMENT FRAMEWORK AT THE ELWHA

In 1992, the Elwha Tribe became recognized as a self-governance tribe, enabling it to engage in a government-to-government relationship with the U.S. and begin taking on programs and services (LEKT, 2011). It used the 638-process to initiate its role as an actionable partner for the ERRP with the NPS, taking over aspects of the ERRP both on the Elwha reservation and outside its borders (Interview-2). “The Elwha Act happened at a time when the government-to-government relationship was developing too; the Tribe has taken advantage of that. There are specific statements in the Elwha Act about obtaining tribal input on things that affect us” (Interview-2).

During the finding phase of the ERRP, Tribal representatives acted on their government-to-government relationship and utilized their rights to negotiate directly with the U.S.

government. A tribal leader described these efforts:

“I’m representing a sovereign nation, with a government-to-government relationship with the U.S. government. I went to Washington D.C. and asked USFW and USGS to put more time, and effort, and funds toward river restoration, and they responded at that level. We have the right to do those things; we have the right to go in and lobby for our position with our Congressmen, and we take advantage of that. I’ve insisted that they follow their rules and agency positions for how they are required to interact with, and consult us, on anything that affects the Tribe. We’ve been pretty careful about making sure that those things are done.” (Interview-2)

ANNUAL FUNDING AGREEMENT

As the action agency authorized by Congress in the Elwha Act, the NPS was given control over project funds, and had the authority of awarding contracts for analysis, planning, and implementation. Shortly after the dams were acquired in 2000, and implementation planning began, the Elwha Tribe entered into an Annual Funding Agreement (AFA) with the NPS through the “638-process” under the Self Determination Act. Many tribes had previously utilized these agreements across the U.S. to take over programs from the BIA. The NPS’ use of AFAs was rare, and its contract with the Elwha Tribe was one of only four others at the time. In the case of the Elwha Act, the AFA with the Elwha Tribe was the only partnering agency awarded a consistent source of funds, and the power to conduct its own contracting for projects specified in the negotiations leading to the agreements (Interview-1).

The AFA was a tool utilized by the Elwha Tribe’s Natural Resource Department and the NPS to reach agreement, providing a written guideline or outlook of the tasks the Tribe would take on each year (Interview-3). It was negotiated to outline each partner’s participation in the project, including the costs of each action and the review mechanism (Interview-1). It further

designates the points of contact for each entity and reasoning behind each action (Interview-2). “The Tribe developed alternatives for each facility and did the design, they asked [the NPS] to do the construction; but the Tribe didn’t do it in a vacuum, there was a feedback mechanism, [the partners] were interacting” (Interview-1).

The AFA’s were initially negotiated annually, but later transitioned to a multiyear agreement. In describing the negotiation process, Elwha Tribe Natural Resources staff commented:

“You go in there knowing that there is some give and take, you have to negotiate. You need to hold your ground but you need to have flexibility and know where you’ll bend a little. You also have to prepare to anticipate where they are at, through their procedures. You have to become educated on their role as well.” (Interview-3)

The agreements serve to protect each side’s interests, to ensure that conditions are met and actions taken are properly executed and documented (Interview-2). Since the Elwha Act mandated all project funding be appropriated through the NPS, the AFA requires the Tribe to check in with the Park Superintendent at specified points before proceeding with further actions (Interview-1). “The AFA paid for the staff [the Tribe] needed to carry out the parts of the restoration on the reservation and allowed the same staff to take part in presenting the Tribe’s position on other parts of the restoration process” (Interview-2)

Mutual dependency and trust between the entities were not always found in the early stages of planning. When the NPS and Elwha Tribe started working on the design of project facilities within the Elwha reservation, the Park began inserting comments and objections for items not limited to the project safety or costs, as restricted in many federal laws, including the NPS Organic Act. To resolve these issues, Elwha Tribe representatives had a conversation with the NPS northwest regional director, Jon Jarvis, who immediately guaranteed them that the issue

was taken care of (Interview-2). Jarvis was previously superintendent of Mt. Rainer National Park and was instrumental in the landmark MOU established between the park and the Nisqually Tribe. “He was the most knowledgeable person in the NPS about tribal sovereignty and the government-to-government relationship. He recognized that they should defer to the Tribe on reservation, except for things that would affect the park, and safety and cost issues” (Interview-2).

The AFA between the NPS and the Elwha Tribe is representative of improved mutual dependency and trust between the entities. Up until this point, the Elwha Tribe had secured its own funding through BIA Water Resources funds, and performed the technical analyses that led to the Elwha Act passage and subsequently provided the information documented in The Elwha Report (Interview-2). When politics were slowing down funding acquisition in Washington D.C., the Elwha Tribe transferred \$1 million of its hatchery funds to the NPS to conduct the 1995 PEIS. The funds were later returned once project financing was obtained (Interview-2).

The issues of jurisdiction within both reservation and park boundaries would continue to come up throughout project planning and implementation, but the initiation of the AFA negotiated many of those concerns preemptively. “Without the tribe as a partner, [the NPS] could not go on to their reservation and implement any actions associated with the project” (Interview-1).

Memorandum of Understanding to Establish a Framework of Cooperative Government-to-Government Relationship

In 2008, a MOU was negotiated between the Olympic National Park and the tribes on the Olympic Peninsula, recognizing that “administration of the ONP by the NPS can affect natural and cultural resources that affect tribal rights or interests. ONP is part of the NPS, within the

Department of Interior, and as such, has a solemn trust responsibility pursuant to the treaty obligations of the United States” (NPS, 2008). Although not solely addressing the co-management concerns of the Elwha Tribe, the MOU explicitly states a purpose to:

- a) Support effective, efficient, timely, and respectful consultation, communication and discourse between and among the Parties;
- b) Improve coordination and collaboration of policies and programs affecting the resources within the boundaries of the ONP;
- c) Facilitate the sharing of information and expertise; and
- d) Promote collaboration in the protection, use, and conservation of natural and cultural resources for the benefit of the present and future generations. (NPS, 2008)

It outlines the roles of the principal contacts for each party, and commits to share and communicate information and pursue opportunities for collaboration, among other obligations with an objective to establish and implement a framework for cooperative government-to-government relationships between the Parties (NPS, 2008). The intent of the umbrella agreement was that the particulars for each tribe would be unique, however individual MOUs for each tribe have not been established (Interview-1).

The MOU designates Brian Winter as the NPS fisheries technical coordinator to the Elwha Tribe, and Rob Elofson is the Tribe’s fisheries technical coordinator to the NPS. “If there is anything they want to talk about (not just Elwha related) the liaisons will call each other and discuss those issues” (Interview-1). Winter is the liaison at the staff level, where most of the interaction and collaboration takes place, but policy-wise, the tribal chairperson and park superintendent are the leads.

Though not implemented until 2008, this MOU represents a co-management commitment by all parties. The details of the frameworks, and actions put in place following the 2008 MOU are yet to be determined. In the case of the Elwha Restoration Project, the 2008 MOU came late

in the course of the project, and it was the AFA that outlined the working relationship between the ONP and Elwha Tribe pertaining to river restoration

The other entities involved in the collaboration for the ERRP function in a variety of venues, in addition to the direct co-management relationship that exists between the NPS and Elwha Tribe for project implementation. The Fisheries Technical Committee has been meeting for 18 years planning Elwha fisheries restoration under the state co-manager arrangement with WDFW. Although most decisions and responsibilities for Endangered Species concerns rest with the park, they do take the input of the Tribe, NMFS, EPA, and WDFW. All parties meet to discuss technical issues, including the fish restoration plan and adaptive management plan, and generally operate on consensus, though the final decision authority rests with the NPS, as it is the responsible agency to Congress (Interview-2).

Efforts Toward Mutual Understanding

Both the NPS and the Elwha Tribe have made efforts to understand each other, and each other's capacity and jurisdiction that limit their actions. "I think both sides have made a great deal of effort to improve the working relationship" (Interview-2). Elofson and the Elwha Tribe Assistant Director of Natural Resources, LaTrisha Suggs, both took 300 hours of unrequired Federal Acquisition Regulation (FAR) training in order to better understand the federal contracting process, and to relay that information to the tribal council:

"There was some confusion on how [contracting] would come about and what the limitations were on the agency, as far as working with the Tribe. The Tribe has different funding processes than the national government... So [Elofson and Suggs] did the FAR training and it's worked much better since then." (Interview-2)

The NPS provided a one-time training to its ONP staff on treaty law, specifically in Washington State, in order to improve its employee's understanding of the constraints of their

authorizing legislation, and the Tribe's rights (Interview-1). The Elwha Tribe also brought their perspective to the training, providing direct application for the NPS staff present. They hired Charles Wilkinson, an expert in the field, to give a workshop on treaty rights. A Tribe member present recalls, "he pointed out that the Tribe can come in and negotiate how to become compliant with treaties, so that tribal members can utilize their right to and hunt and gather on Park land" (Interview-2).] A NPS staff person commented on the workshop:

"You can read a treaty and if you have no background in it, it may mean one thing, but when you get into treaty law and all the decisions that have occurred after that... we learned a lot in that effort." (Interview-1)

These concerted efforts were well received by the Park and the Tribe, "Both the park and the Tribe have tried to interpret [the collaborative process] in such a way as to make the working relationship easier" (Interview-2).

THE ELWHA RIVER RE-BORN

Dam removal began in 2011, and progressed at a rapid pace and ecological functions not seen since the pre-dam era have been observed. Currently (June 2013), the Elwha Dam (Figure 16) has been completely deconstructed, and only a third of the Glines Canyon Dam remains, although the main section blocking the river channel has been cleared to allow reservoir drainage.

Massive amounts of sediment that had built up in the reservoirs behind each dam were immediately released when the dams were removed. It was predicted that the two reservoirs held back 24 million cubic yards



Figure 16: Elwha Dam site, after deconstruction (Source: Olympic National Park)

of sediment, however, it is now known that the total amount is closer to 34 million cubic yards (Figure 17). This discrepancy was due to an inaccurate measurement of land elevations dating back to a 1917 mapping of Lake Mills that recorded the elevation 20 feet higher than they accurately measure (Mapes, Jan. 2, 2013).

This unmitigated release of increased sediment has caused damage downstream and delayed dam removal and restoration efforts, including damage to the newly built Port Angeles water treatment facility and fears of lethal conditions for fish and other nearshore wildlife. Dam removal is currently on hold for at least another eight months and could extend until 2014 so as to observe planned moratoriums already scheduled to allow fish migration windows (Mapes, Jan. 2, 2013). It is predicted that only about 18% of the total sediment hoarded by the two reservoirs for over one hundred years has been released downstream, and the remaining sediment is waiting behind the last 60-foot section of the Glines Canyon Dam yet to be removed (Mapes, Apr. 20, 2013).

Sediments have deposited sand and mud along the lower stretches of the river, creating new beaches, and reshaping the nearshore benthic environment. Transects set up just offshore prior to dam removal to monitor these changes have found that areas where bare substrate made up the bottom environment near the river mouth are now covered in an increasing layer of sediment (Mapes, Aug. 5, 2012).

Although dam deconstruction has been mostly completed quickly and with great spectacle, the process of restoration will proceed for years to come. Scheduled and unscheduled stoppages have occurred throughout removal to allow for “fish windows,” when seasonal runs were protected from the threat of suffocation from high river sediment loads. Water levels have



Figure 17: Sediment plume at Elwha River mouth in the Strait of Juan de Fuca in April 2012 (left), and newly formed beach in May 2013 (right) (Source: Tom Roorda)

receded from the reservoir augmented flows to nearly pre-dam levels (Figure 18), and vegetation efforts have begun.

Salmon and steelhead have been transported to upriver sections of the river and its tributaries, and some have reached those areas on their own (Mapes, Sep. 14, 2012). “Pinks, chinook, steelhead and coho have all been spotted utilizing every portion of the new habitat, from side channels to the main stem” (Mapes, Jan. 2, 2013). Scientists who observed full salmon carcasses on the river banks last year, are now seeing only pieces, indicating that predators and scavengers are quickly taking the opportunity to feast on the returning fish (Mapes, Jan. 2, 2013).

Restoration planning has not been without controversy, as the debate over how fish populations would be reintroduced into the newly freed river became polarized over which fish would be provided the opportunity. Many conservationists want the river provided the opportunity to restore itself, allowing natural reintroduction of fish populations and ecosystem functions. The Fish Restoration Plan does not allow for the timetable necessary for a natural process, which could take 30-50 years before any sustainable population is reestablished, and the

Elwha Tribe is anxious to begin fishing its river again after a hundred year wait. State and tribal advocates want to see fish in the river sooner, rather than later, and plan to use hatchery fish to “jump start” the process of repopulating the Elwha and its tributaries (Figure 19). Both sides of the debate have science to defend their proposals, and passionate communities of resource users battling for their cause. The debate culminated in a lawsuit by the Seattle based Wild Fish Conservancy and other native fish advocates against the Lower Elwha Klallam Tribe, state, and federal resource managers, including the NPS, to prevent the tribal hatchery release of non-native Chambers Creek Steelhead, which it had previously produced at its hatchery for years to provide a fishing opportunity for tribal members (Mapes, Sept. 16, 2011). The tribe had already agreed to a five-year fishing moratorium upon the completion of dam removal, in order to allow natural fish propagation to occur upstream. The Tribe is concerned that without the Chambers Creek Steelhead, there is not going to be anything to catch at the end of the moratorium. Elofson, was quoted, “If you make it another 10 or 15 years, you are talking about almost a generation. We want to maintain a fishery for our tribal members,” and not just anywhere: “On the reservation, on the Elwha,” (Mapes, Aug. 24, 2011).

The hatchery fish conflict again brought treaty rights to the forefront at the Elwha River. Native and non-native resource users in this case have fundamentally different perspectives on the value of salmon, and its role in their community. State and federal resource managers, under the legal obligation to honor the treaties and collaborate with the Elwha Tribe to find a solution that does not violate their reserved fishing rights, as well as protect the endangered species and habitat, had to balance the scientific imperatives supporting natural river restoration to the social and legal environment present. Ironically, the Tribe, the NPS, and federal and state fisheries managers were all on the same side of this lawsuit. Will Stelle, the regional director of NOAA

fisheries (NMFS), was instrumental in explaining the position of the government resource managers, and the collaborative decision-making that led to NMFS' aligned position with the Tribe. In an op-ed in the Seattle Times (Sep 14, 2011), Stelle wrote:

“After a decade of work, endless public process and three independent science reviews, the agencies and tribes devised a fish-restoration plan built on an active reseeding strategy that is well-grounded conceptually and open to further refinement as we proceed... the restoration plan calls for increasing the natural production of fish as quickly as the river allows and phasing out hatchery fish as the wild populations gain strength... What's the rush? Amid the concerns and consequences of dam removal, we must not lose sight of the severe effects to the Lower Elwha Klallam Tribe in the near-term and its treaty-protected fishing right. NOAA Fisheries strongly supports the tribe's treaty right and knows that the right means fishing to the tribe, not just the mere existence of fish.”



Figure 18: Lake Mills is drained following the removal of the Glines Canyon Dam (Source: Tom Roorda)

Eventually, the case was found moot, and thrown out by the judge. The Tribe had been properly and legally permitted to operate its hatchery. However, pragmatism has been embraced by both sides, and while the native fish advocates' lawsuit lacked legal merit, the Tribe decided to indefinitely end its non-native steelhead hatchery program, in favor of allowing a period of monitoring and evaluation while native strains naturally return. After the moratorium, the Tribe will fish the last non-native steelhead returns from previous 2011 releases, and work with the state to reintroduce native strains of fish into the river (Mapes, Feb. 17, 2013).

With dam removal nearly complete, the remaining work consists of re-vegetation, and fisheries planning. The NPS and Elwha Tribe are again partnering on these efforts, with the NPS taking the lead on design, and the Tribe leading implementation around Lake Aldwell; "In fisheries, there's no question that [NPS has] to partner with the tribe," said an NPS staff person, "They are a co-manager outside of the park and with the state, and we are not" (Interview-1). The Fisheries Technical Committee will continue to collaborate on those issues as the project proceeds.

Remarking on the collaborative relationship over the years, the Elwha Tribe is happy with the progress the partners have made, "There are times when we had problems, but nothing that couldn't be handled and ironed out. We've managed a good working relationship with the NPS and I think we both are satisfied with the result as far as the river restoration is concerned" (Interview-2).

CONCLUSIONS: COLLABORATING TO FREE THE ELWHA RIVER

While the dam removal and restoration is still currently underway, an opportunity exists to examine the management relationship between the Tribe and its partners, to explore the role of government actors, and tribal sovereignty and autonomy over natural resource issues encompassing a massive ecological project that directly impacts a treaty tribe's reservation, as well as ancestral homelands. In Washington State, the right to participate in these processes has been hard fought, and contemporized in ways not seen elsewhere in the U.S. The ERRP represents an opportunity to test this progress toward true co-management.

This study set out to answer the following big picture research questions about the ERRP:

1. How is the co-management process facilitated throughout management plan development and project implementation?
2. What are the social outcomes resulting from co-management?

The findings demonstrate that although not perfect, co-management is both comprehensively integrated throughout the ERRP, and has had countless positive impacts on its outcomes, in terms of attaining project goals, and immeasurable impact on the Elwha Tribe that will continually be discovered for generations.

Jeff Crane (2011) remarked on the cumulative effort and obstacles on the project's path, when the dams were nearing the day they would be torn down, "The story behind the Elwha River activists' success is one of cooperation and creativity resulting in a broad coalition of unlikely allies. The fact that these dams are still standing nearly 20 years later reveals the continuing tension between economic development and salmon restoration in the Pacific Northwest" (Crane, 2011, p. 133).

CO-MANAGEMENT OF THE ERRP

Dam removal and river restoration on the Elwha has provided a unique case study, with multiple arrangements and conditions indicative of management frameworks found in the academic literature, as well as government institutions. The winners most often tell these stories, which makes their actions throughout the process appear successful and correct. In the case of the Elwha River, it was the unique combination of active participants, favorable legal foundations, a moral imperative, and the localized environmental and political conditions that made the Elwha and Glines Canyon dams ripe for deconstruction, though it took decades before the tide turned to favor dam removal. The early phases of collaborative action between the many government and non-governmental entities, including the Elwha Tribe, set a foundation for the co-management arrangement between the two lead project partners, the NPS and the Elwha Tribe, once implementation began.

The indicators of pre-conditions, processes, and outcomes of co-management with indigenous communities found in the literature are summarized in Table 7. Those components that were identified in the arrangement at the ERRP are recorded, as well as the degree which each is present. The results show a comprehensive effort at co-management between the major project partners, i.e., Consensus-based decision-making, transfer of funds, invitation of tribal knowledge, shared implementation, but also display areas where important components are lacking, and improvement could be made, i.e., Formalization of co-management arrangement in a legally binding document, and similar documentation of how TEK would be used.

Table 7: Summary of Co-Management Indicators Present at the ERRP

Co-Management Indicator	Present at ERP?	Literature Source for Indicator
	No/Low/Med/High	
Pre-conditions		
<i>External</i>		
Real or imagined crisis (external)	High	Plummer & Fitzgibbon, 2004
Legal government mandates for co-management	High	Plummer & Fitzgibbon, 2004
<i>Human Dimensions</i>		
Willingness for local users to contribute	High	Plummer & Fitzgibbon, 2004
Opportunity for negotiation	High	Plummer & Fitzgibbon, 2004
Leadership or energy center	High	Plummer & Fitzgibbon, 2004
Common vision/existing networks	High	Plummer & Fitzgibbon, 2004
Long term positive working relationship	High	Kenney, 2012
Process Components		
Recognition of inter-organizational collaborative framework; Explicit recognition of tribal role in a legally binding agreement and/or MOU	Med	Tipa & Welch, 2006; Kenney, 2012; Plummer & Fitzgibbon, 2004
Recognition of value of tribal knowledge	Low	Kenney, 2012
Formal agreement on Use of TEK	No	Tipa & Welch, 2006
An exchange of knowledge reflected	High	Donoghue et al., 2010
Power sharing	Med	Tipa & Welch, 2006
Joint decision-making authority	High	Donoghue et al., 2010
Veto power for both parties	Med	Donoghue et al., 2010
Autonomy for specific actions	High	Donoghue et al., 2010
Transfer/exchange of funds	High	Donoghue et al., 2010; Kenney, 2012,
Joint Implementation of on the ground work	High	Donoghue et al., 2010
Invite tribal management expertise outside of treaty lands	High	Kenney, 2012
Adaptive management plan	N/A	Tipa & Welch, 2006
Participation balance	Med	Tipa & Welch, 2006
Outcomes		
Mutual dependency & benefit of collaborating	High	Donoghue et al., 2010
Equity of decision-making	Med	Plummer & Fitzgibbon, 2004
Efficiency of decision-making	Med	Plummer & Fitzgibbon, 2004
Legitimization of actions	Med	Plummer & Fitzgibbon, 2004
Capacity building		Plummer & Fitzgibbon, 2004
Self-determination of tribe	High	Plummer & Fitzgibbon, 2004; Tipa & Welch, 2006
Empowerment of tribe	High	Plummer & Fitzgibbon, 2004
Stewardship	High	Plummer & Fitzgibbon, 2004
Preservation of cultural identity	High	Tipa & Welch, 2006
Recognition of access, use, development, protection rights	High	Tipa & Welch, 2006

Each phase of the co-management arrangement at the ERRP (preconditions, process components, outcomes) is discussed in greater detail below in the following sections and compared to the theoretical frameworks for collaborative and co-management discussed earlier.

EARLY FORMATION OF COLLABORATIVE RELATIONSHIPS

In analyzing the entire lifetime of the Elwha River Restoration Project, its success is due in large part to how it began. The way the entities arose, formed sides, and positioned themselves throughout the prolonged legal and political battles demonstrated the positive characteristics presented in the Elwha River case itself as a large open policy window with many coupled issues and motivated policy entrepreneurs leading their cause. It would also stir up the complex and intense legacy of conflict surrounding Native American tribes and salmon in the Pacific Northwest.

Koontz et al. (2004) describes a policy window as the combination of active issue definition, and passive external forces, such as timing and environmental conditions, that combine to create both willing actors and an astute audience ready to take up an issue and carry it forward, to a successfully changed (and improved) state. How and by whom those conditions are defined, by what standard an issue is improved, depends on what side of history you are on. Referring again to Weiss's (1987) and Borrini-Feyerabend et al.'s (2007) reasons to collaborate, many of them are evidenced in the social conditions and events leading up to the ERRP:

- **Respect and equity:** the transition in U.S. Indian Policy to an era of tribal self-governance and the defense of treaty rights, especially in WA, put a large impetus on the necessity to restore the Elwha River to enable the Elwha Tribe to exercise their rights and culture
- **Effectiveness/Efficiency/Financial benefit:** The Elwha Tribe and NPS mutually benefitted from available funding sources for the data gathering necessary to prove their position on dam removal; though litigation dragged on for a considerable length of time, it had the

potential of continued and prolonged conflict had the interveners not advocated collectively for dam removal

- **Shared professional values:** River restoration was always the common purpose for each of the interveners, though it took some time before dam removal was the agreed means to that end
- **Political advantage:** the interveners had to align to sway FERC and dam removal opponents to support the idea of restoration, as well as mobilizing the local public to sway political representation
- **Problem solving:** Strategically aligning the interveners around a common goal created a powerful opponent to FERC and the business lobby, and brought the entities together
- **Reduction of uncertainty:** the sharing of information by interveners
- **Legal mandates:** Multiple legal mandates were present, including: the Elwha Tribe's treaty rights and federal consultation requirements, the use of the new ECPA by environmental groups to force the inclusion of salmon protections in FERC's dam licensing decisions, the Wilderness Act and ONP's wilderness designation, which outlawed structures such as dams within the national park.

The early stages of the efforts to acquire the dam removal decision was impacted by appealing to decision makers with compounding related issues, such as environmental justice for the Elwha Tribe, "This is a very unique case. One of the reasons why we have this project is because the answer was so obvious, that one of the ways to make the Tribe whole was to take the dams out, and the testimony of tribal elders helped secure that; I don't know if there are other cases that are so clear cut" (Interview-1).

The Elwha River dams case present opportunities as a poster child for two legal challenges brewing in the PNW environmental community. As discussed earlier, Native American tribes and state agencies were still adjusting to the recent ruling in the Boldt Decision. Phase II of that case had been thrown out, and tribes were shopping for a case to adjudicate the habitat protection clause of their co-manager status. Elwha tribal lawyers were preparing this to be that case. The threat of potential legal action on treaty fishing rights at the Elwha gave the Tribe a huge piece of leverage to encourage collaborative action that might avoid a contentious

court battle. No agency or legal team wanted to revive the decades of conflict that led to the Boldt Decision just a few years prior.

Likewise, environmental groups had litigious action in mind at the Elwha to strike down FERC's licensing practices under the ECPA and as a violation NEPA by permitting dams without fish passage and proper consultation. A debate on dam removal was not just occurring on the Olympic Peninsula, but across the western United States. Environmental groups were staging campaigns at many dams that had either outlasted their hydroelectrically benefits, or were built without fish passage facilities. The groups wanted to set legal precedent at the Elwha, to make similar charges at other dams (Crane, 2011). Those issues came to head when Senator Gorton used the Elwha River case as a hostage to gain leverage to prevent other dam removals on the Columbia River in Washington State. For the Elwha, the dams' diminished power production was easily replaced from other sources, saving the jobs that stood to be lost if the paper mills were shut down due to dam removal. This revelation was a tipping point in the FERC proceedings. Should the power company and paper mill companies continue to fight to keep the dams, they faced a costly mandatory renovation to install fish passage infrastructure at both sites. Once the power solution was apparent, and it became evident that it was in the government's interest to remove the dams, including financing the project, the companies changed tactics, in an effort to avoid paying for such improvements, or getting stuck with the bill for restoration, should they be found liable for ESA violations. "After all of the information started coming together, the companies didn't want to foot the bill for dam removal. But, when we started discussing a compromise where the federal government would pay for removal, and we would avoid 10-15 years of legal action to get it done, they were willing to cooperate" (Interview-2)

The collaborative relationship between the Elwha Tribe and the NPS, its primary federal counterpart, was developing throughout this stage, though each was constrained by their unique roles when it came to advocacy, “There’s peaks and valleys in the relationship,” said an NPS staff person, “The relationship was tentative [early on] because tribe had called for dam removal, but the NPS did not support it at that time, in part because it did not see it as very realistic” (Interview-1).

The Tribe on the other hand had no internal reservations or restrictions in advocating for their cause:

“The Tribe was completely behind it; [we] never had to worry about any opposition from within the tribe. Weighing the costs and benefits just completely favored restoration of the river, and we were in complete agreement on that. The environmental groups were in a similar situation – it was as good as you could get for getting something like this done. Slowly the federal agencies came around and supported it, and our congressional delegation came around to supporting it too” (Interview-2).

When environmental groups brought up by that the NPS was violating its Organic Act and later the Wilderness Act by allowing the Glines Canyon Dam within national park boundaries (Busch, 2008), the NPS changed its position, “You get into this situation when no one questions the status quo because that’s the way its been done for so long,” A Tribal staff person observed, “It wasn’t until someone pointed it out that they were violating the Organic Act, and they realized that by partnering with the Tribe they were going to have better luck with the process,” (Interview-3). The NPS shifted thereafter to advocating for dam removal.

Once all of the agencies (NPS, NMFS, WDFW, BLM) came onboard to the idea of dam removal, collaboration was jump-started. All parties jointly filed to intervene in the FERC proceedings, united around a single goal, and finally with agreement on how to attain it:

“The relationship improved dramatically when agencies got onboard with dam removal. Though the Tribe called for dam removal way before the agencies, there was

understanding that in the FERC proceedings, the interests of fish restoration were common. We were able to push that in FERC process, so we didn't have to mix words with the Tribe because the end goal was the same, we were all looking for full natural stock restoration, as opposed to fish ladders and screens" (Interview-1).

The Elwha Tribe was instrumental and showed great leadership in obtaining the legislative victory of the Elwha Act that put an end to the conflict-ridden FERC proceedings. A NPS staff person reflects on each entity's role during that time, "The Elwha Act passed in large part because of tribal efforts, not so much because of agency effort" (Interview-1). After the Act was passed, the collaborative relationship became immensely important, as both parties were dependent on each other. The NPS had to take a back seat to the Tribe, because the Elwha Tribe had performed the majority of technical analyses up until that point, via funding secured through the BIA. Funding of the Elwha Act was limited, so the Tribe's information was shared with the NPS and primarily made up The Elwha Report submitted to Congress. Reflecting on their collaborating at the time, an NPS staff person said, "Certainly [we had] a good relationship once the Elwha Act was passed, and [while compiling] *The Elwha Report*. We all really needed the Tribe because they had the funding and expertise that we didn't have" (Interview-1). The interplay between the federal agency's roles as sometimes leader and sometimes follower throughout the FERC proceedings and into project implementation helped build a substantive collaborative relationship with the Tribe that was more than just adhering to consultation guidelines. Referring back to discussion of the roles of government in collaborative environmental management (Figure 13), it would be difficult to pinpoint a precise and straightforward route through the concept map. This enabled the parties to both shape issue definition, share respective resources, and split power in decision-making processes, factors that all aided in the successful outcome of dam removal and fisheries restoration.

Both parties brought strengths and expertise, said an Elwha Tribe staff person, “The Park, as a federal agency, has some strength, and the Tribe, as a federally recognized tribe has some, we both used them to try to get the Elwha restored” (Interview-2). The geographical constraints of the ERRP project area required that consultation practices be followed closely since the lower section of the river passes through the Elwha reservation, where the Tribe takes the lead and “are leery of allowing outside federal entities to extend jurisdiction onto the reservation” (Interview-3). Without co-management, it would have required the NPS to impose its will on the Elwha Tribe and reservation, and the Elwha Tribe to impose its will inside the jurisdiction of the ONP. Both parties needed each other in order to build a coherent, consistent, and successful project remarked an NPS staff person:

“There wasn’t a whole lot the NPS could do without the Tribe’s support; our boundary starts at river mile eight, so we were way outside of our boundary doing things for the City [of Port Angeles], water mitigation, the Tribe, and we had no authority on the reservation. So the Tribe had to be a close partner. Frankly, the Tribe needed us as well in order to get the project through, so we had mutual needs.” (Interview-1)

Speaking on the role of required consultation because of the river’s location, an Elwha Tribe staff person reflected, “If the Tribe did not have the reservation located at the mouth of the river I don’t think this project would have taken off” (Interview-3).

CO-MANAGEMENT PROCESSES AT THE ERRP

Within the context of co-management frameworks provided in the academic literature, the processes found at the ERRP fit the description of some of the key characteristics, but is notably absent in others. According to Mattessich et al.’s process components included within the 20 success factors for successful collaboration and the characteristics listed in the Plummer and FitzGibbon (2004) co-management framework, the ERRP’s co-management arrangement is

incomplete. While both members are involved in decision-making that is consensus-based and determined via negotiation and communication, there is no formalization of the process to ensure clarity and transparency and explicitly define the power sharing arrangement. And while both parties have engaged in varied degrees of intentional exercises to build mutual understanding, their perceptions of the other do not necessarily reflect that those values are shared. The responses from Interviewees to these concerns are discussed further below.

The implementation phase meant project participants would be pared down, and the NPS would take the lead, as delegated from the SOI and specified in The Elwha Act. When the EIS process started, the NPS again chose to collaborate with entities by creating the “NEPA core team” and delegate portions of the analysis, “the NPS could’ve gone out on our own, but that didn’t make a whole lot of sense, so we went for consensus-based decision-making” (Interview-1). An expectation of consensus on all project decision-making was established among all partners (though treaty rights bolstered this de facto requirement). And further action by both parties at building mutual understanding would strengthen their trust throughout the course of the project. Up until that point, the Elwha Tribe had done the majority of data gathering, so the NPS had no choice but to take a less prominent role in the EIS process, though it was still the lead action agency. A mutual dependency strengthened the co-management relationship: The NPS needed the tribe’s information and expertise for the Elwha Report, and the Tribe needed the funding authorized in The Elwha Act to continue their analyses for the EIS. It was still a situation with many entities involved and competing interests who needed to make collective decisions on the technical aspects of the restoration plan, including fish restoration plans and the role of hatchery operations, sediment mitigation, re-vegetation planning, outreach activities, etc. Though there was never a formal agreement established to outline the collaborative process, consensus

was a de facto rule, “We tried to make sure that everybody had their voice heard, we didn’t have deference to one over the other; the whole idea of The Elwha Act was to avoid pending and future litigation, there was no point in going that way, but still there were a lot of parties that had to play well together to make it happen” (Interview-1). After the group victory in the FERC proceedings, the entities learned that their strength was in their collective power, though the Tribe was probably the strongest player, in terms of their legally defined treaty rights. An NPS staff person remarked, “We are stronger together, no one could have tried to do this on their own” (Interview-1).

The NPS’ choices during this phase demonstrated trust, and a commitment, in their partner, the Elwha Tribe, reflecting a long-term positive relationship strengthened by the Tribe’s leadership throughout the recent FERC proceedings.

The situation was not ideal for supporting collaboration initially, because Congress mandated the NPS as the action agency under the SOI and directed all funding and final decision-making through it. This created some tension among the partners, said NPS staff, “There is no legal way to delegate that. In a perfect world, what would’ve happened is Congress would have sent the Tribe, and the NPS, and the agencies different pots of money, and we would have coordinated; what Congress chose to do was send all of the money to the NPS, and we had to apply it as we felt. Having said that, we make sure we check with our partners, including the Tribe, before we make any decision” (Interview-1). The NPS established an AFA with the Elwha Tribe, an arrangement that they did not enter into with any other partner, transferring funds to the Tribe and facilitating their autonomy to take a leadership role in some aspects of the project. The AFA was quickly set up and helped abate tensions over control of project funding, and to create transparency, “then the Tribe could see, and we could work out with the Tribe exactly what

we're doing to protect their interest, and what they can do as a sovereign entity; it's not the NPS telling you have to do this, instead, this is what you are going to be doing for yourself'

(Interview-1). The AFA, enabling the Tribe to initiate its their contracts and implement actions. The arrangement was unique among all parties, because of the federal government's trust responsibility. They were the only entity allowed to design project actions for their own interests. Through the initiation of the AFA, both parties had an incentive to get to know the other, to aid in, and be successful in negotiations, said an Elwha Tribe staff person:

“We learned about AFAs, we read the Federal Register, to understand the rules and regulations for what [the federal agency] can and can't do; you have to really understand what they can't do... you have to figure out their process, what do we think they will be able to do for us, according to their policies. How far can they go [in negotiations]?”
(Interview-3)

When implementation started, the partnership again was very important because the Tribe stood to gain so much through the project, “The Tribe being at mouth of river – having treaty rights that they couldn't pursue because the dams had wiped out the fish, and a lot of their folks living under poverty line (more than anywhere in Clallam Co) – their impacts were going to be the greatest” (Interview-1). The collaborative relationship continued to improve after the AFA was established and the Tribe had some autonomy in the project, “instead of the Tribe seeing another federal agency telling them exactly what to do and not being in control of their own destiny” (Interview-1).

Not everything went smoothly, but the partners made active efforts to improve their mutual understanding. Elwha Natural Resource Department staff commented on the sometimes-painstaking efforts it took to educate partners on the intricacies of treaty rights, “The Tribe is constantly reminding entities of the treaty and the responsibilities that the federal government is accountable to” (Interview-3). The turnover of staff at the NPS slowed progress. In the 11 years

since the NPS acquired the dams, there have been four different superintendents of the ONP, “Every three or four years we have had to re-educate them of this process, what we are doing, and why we are doing it; about the treaty, and the 1992 Act” (Interview-3). Superintendents were appointed with varying degrees of knowledge and/or interest in working with Native American tribes, presenting a new challenge to re-establish connection and build relationship between project partners. The Elwha Tribe influenced the NPS’ relationship with other tribes as well; “We’ve done more education with them with new superintendents, stressing the importance of maintaining a positive relationship with the eight tribes [on the Olympic Peninsula]” (Interview-3). “There were differences of worldview in the past, but both parties have worked hard to understand the other; it’s one thing to draft a MOU, which occurred later in the process, but its another thing to understand the whys and wherefores [of the Tribe] while working side by side in the FERC proceedings” (Interview-1), said NPS staff.

Later in the project both parties made deliberate efforts to improve mutual understanding both at the leadership and staff levels, gaining the respect of the counterparts in the process. “I give Robert Elofson a tremendous amount of credit, because he recognized both of our constraints. He and LaTrisha Suggs went to [FAR] because he wanted to understand why the NPS’ actions were limited in some regards” (Interview-1).

The FAR training and AFA processes helped the Elwha Tribe to improve its own internal administrative and contracting processes, “We refer to the FAR regulations in implementing some of our contracts; we use some of their clauses; we noticed that even our lawyers have taken some of our personal services contracts and used our outline as a template for the other tribal departments” (Interview-3).

The NPS' training on treaty rights presented an opportunity for both sides to build on their understanding of each other, "I don't think they completely understand that here on the Olympic Peninsula, out in the middle of nowhere, they are the federal entity, and we have a relationship with *them*, and our communications goes to *them*. I think they are getting better at understanding that, but I don't think that they read the treaty," an Elwha staff person explained, "providing the education in moments like that helped to strengthen the understanding of those who administer the [NPS] Organic Act, and helps to provide those members with a stronger understanding of the Tribe" (Interview-3).

Reflecting on his own progress over the course of the ERRP, an NPS staff person said, "I'm always learning from the Tribe, it's always going to be that way. To a certain extent they are learning from the NPS as well" (Interview-1). An Elwha Tribe staff person reflected a similar sentiment about their project partner, "The respect goes both ways. There' isn't anybody working on Elwha restoration who doesn't want to get Elwha restoration done, in the best possible way. Everybody who is working on it put their best effort forward, and made working together very easy" (Interview-2). The NPS approached the Tribe and federal consultation policies with a great amount of respect throughout the project, "We've followed protocol to a 'T,' and I think that helped demonstrate to the Tribe too, that, it's not just the dam removal process, its how we treat them from a cultural standpoint" (Interview-1).

The AFA and its associated negotiation sessions were the backbone of the co-management arrangement between the NPS and the Elwha Tribe, The agreement allowed for an unprecedented transfer of funds from the NPS to the Tribe and allowed some autonomy in decision-making and shared implementation of project actions. The act of negotiating each agreement brought the two partners together in a venue that enabled both the protection of each

party's interest, as well as the opportunity to demonstrate their shared goals, enabling the give and take through transactional decision-making highlighted as an important component in the Plummer and Fitzgibbon (2004) framework.

Perhaps indicative of the functioning co-management arrangement between tribal and federal governmental partners, Stelle indicated in an op-ed that the threat of litigation from native fish advocates in order to spur stakeholder collaboration regarding the inclusion of hatchery operations in the fisheries restoration plan for the Elwha River was not only unneeded, but unappreciated, "Do we need the lawyers and litigation in order to compel a continued substantial engagement?" Stelle said. "That is going to happen anyway and you can count on it" (Mapes, Sept. 17, 2011). He then encourages the anti-hatchery groups to join the collaborative effort, instead of adding conflict through the courts, "Join the effort, hold our feet to the fire and commit to success in rebuilding the wild runs of the Elwha" (Stelle, 2011).

Much of the success of this relationship is due to the efforts of individuals, who, working beyond the limits of legally mandated consultation practices, set a precedent and culture of mutual respect amongst the parties, such as Jarvis, who brought his expertise and earned respect among area tribes to the dam removal case on the Elwha River, and NPS ERRP Manager Brian Winter, who had started his career working for the Elwha Tribe, and later managed the NPS's work at the Elwha River. Skilled leaders such as these individuals are an important asset in a successful collaborative or co-management arrangement.

However, none of these management arrangements were formalized as an MOU or legally binding agreement defining each partners roles and extent or oversight both during and after project completion, the decision-making process, communication between partners, jurisdictional boundaries, and the use of proprietary knowledge. The AFA served some of that

purpose, but had to be re-negotiated every year (until they switched to a multi-year agreement), putting the partners as foes throughout the course of negotiation proceedings. No agreement developed on how the Tribe's traditional knowledge would be incorporated into the project or outreach activities. These issues were briefly discussed in project plans, but the inherent sovereignty over TEK is a component of co-management that must be protected for both current and future use. These declarations are best utilized when formed after the Tribe has established internal policies for the use and authorization of such knowledge, which may come as a later step in the development of tribal social capital.

CO-MANAGEMENT OUTCOMES AT THE ELWHA RIVER

The outcomes of the co-management arrangement at the ERRP have begun to show at this date, though the project is not yet complete. Though immeasurable quantifiably at this stage, the perceptions of participants describe positive social impacts in the form of management efficiencies, an improved sense of equity, capacity building and legitimization of the Lower Elwha Klallam Tribe. The ERRP three major outcome components, as identified in the Plummer and FitzGibbon (2004) framework and others (Tipa and Welch, 2006) are discussed below.

Equity & Efficiency

Did the ERRP co-management arrangement create and equitable management environment and produce equitable outcomes for each party? Returning to the criteria Borrini-Feyerabend (2007) offered to describe managing for equity, we can evaluate each component by asking the following questions: Did co-management of the ERRP:

- Help the underprivileged to “develop their own entitlement? **Yes**

- Recognize entitlements rooted in valid and legitimate grounds rather than entitlements rooted in the exercise of one or the other form of power? **Yes**
- Promote a fair negotiation of functions, benefits and responsibilities among entitled social actors? **Yes**

One of the most prominent and emotional reasons behind dam removal has been to return the Elwha River to the Lower Elwha Klallam Tribe, functioning again in its central role in tribal culture and livelihoods. This environmental justice victory is enhanced by the empowering effects of the Tribe's participation in, and leadership of, the efforts to achieve the goal of Elwha River ecosystem restoration.

The actions by both lead entities have made ERRP project management effective and efficient (especially juxtaposed against the twenty years required for the political agreement necessary to fund to project). The consensus-based decision-making processes with a mutually shared goal prevented significant conflict from occurring, and kept project momentum moving forward. The ERRP was born out of collaboration, as a solution to an extremely prolonged and embittered FERC licensing debate. The continuation of those collaborative ideals in the co-management arrangement between the two lead actors has created a working environment where communication is easy, and decisions are mutual. As expressed by the participant interviews, this project simply would not have occurred had the co-management relationship not functioned as it did.

Capacity Building

The government's variation between roles, as follower, leader, and encourager, leading up to and throughout the ERRP, helped to sustain the collaborative effort. Its flexibility allowed authority to be delegated both to the Tribe and joint committees, enabling other actors to

influence decision-making, and further empowering the development of social capital within the participants. For the Elwha Tribe, participating in the management of the ERRP itself is equally important as the protection of the Elwha River, and has had demonstrative, immediate and long-lasting impacts for the Tribe's internal capacity, and self-governance.

The arrangement also enabled the Elwha Tribe's natural resources department to take on personnel, hire technicians when needed, and build tribal capacity within its Natural Resource Department over its lifetime, has had a widespread impact on Tribal administration and management, "We have the best natural resource department in the state. I attribute it to the tribe's priority. It has always been to protect our resources, and it's good that we are in an area where we can do that" (Interview-2).

Legitimization

The success of the co-management at the ERRP has had impacts on other collaborative management efforts with indigenous communities in the region, including other Elwha Tribe natural resource management projects and regional co-management processes (Interview-1, Interview-2), and provided a positive example of such a relationship. The Elwha Tribe specifically has earned respect and recognition because of the prolonged process they endured, and the efforts put in toward their success in the restoration (Interview-2). Not enough can be said of the role of goal alignment early on in the process:

"Both sides have worked very hard to make it work, to get the project done. Both the NPS and the Tribe had the goal of getting the restoration of the Elwha River done, and we tried hard to make sure that the process has achieved that goal" (Interview-2)

NPS staff remarked that, “this project has built a long term and lasting positive relationship with the Elwha tribe” (Interview-1), and set a precedent for relationship between tribes and federal agencies throughout the Olympic Peninsula:

“I think for this region, it’s probably made a great contribution to cooperative efforts by all of the groups: USFW, NMFS, USGS, NPS, WDFW, all of them working together on trying to get projects done. Between the fisheries technical committee and monitoring projects and efforts, there are many places where we’re working cooperatively to gather information and help with restoration.” (Interview-2)

Reflecting on the final stages of dam removal, NPS staff commented on the importance of the co-management arrangement, “The collaborative process is invaluable. [The project] couldn’t have happened without it” (Interview-1).

Elwha River restoration and its managing entities have been on display, and heavily scrutinized, throughout the course of the project. Operating in a productive government-to-government capacity has demonstrated to those watching that it is possible, and prudent. For the Elwha Klallam, this project has strengthened the surrounding community’s social perception of the Tribe, and importantly, “It has strengthened the Tribe’s position, as far as being identified as a government entity, definitely... this project has strengthened the Tribe’s government-to-government relationship and the states are now recognizing the federal government relationship with Native American tribes” (Interview-3).

Cultural Impacts

The cultural impact of the ERRP success is in some ways immeasurable. It will have a great effect on the Elwha Tribe; the impact of getting their river back, the birthplace of their culture, and supplier of sacred salmon cannot be put into words or numbers. The ERRP has played a powerful role in reconnecting the Elwha Tribe with the river, “We take a great deal of

pride in our river. It is the cultural and spiritual tie with everybody; there isn't anyone who doesn't go down to the river during salmon runs to watch the salmon come in; there isn't anyone in the tribe who doesn't have a tight connection with the river" (Interview-2).

Socially and culturally, the outcomes may be linked with the pace and success of environmental recovery. Economically, the benefits will be measurable, and come both immediately and over time. Asked to describe what it meant to the Tribe to potential get the river and its salmon back, tribal chairwoman Francis Charles said, "It's about our ancestors and those before them, we are walking in their footpaths, all the ones before us, they are the ones we want to recognize, and whose footsteps we are following. These were the foods our people lived off. The fish people were beaten and arrested for, to provide food for the table. How do I feel? I don't even know, we have been talking and dreaming about this for so long" (Mapes, Aug. 19, 2011).

CATEGORIZING THE CO-MANAGEMENT OF THE ERRP

Figure 7 is an adapted version of Figure 12 from Tipa and Welch (2006), presented earlier in this report. It is revisited here to identify where the ERRP is located on the spectrum of co-management types from an indigenous perspective. Though the ERRP went far beyond basic consultation requirements in the federal laws and agency policies, the limitations in its execution discussed above in this section leave room for improvement, and prevent it from attaining an idealized form of autonomous co-management, with distinct identities and equal powers in decision-making. Tipa and Welch (2006) critique this definition of ideal co-management as being unrealistic, overlooking the fact that parties in a management arrangement rarely see themselves as equals, and the resources associated with those inequalities enable one party to dominate or control management functions. Often, these arrangements are characterized by

limited interaction and ignore the complexities of evolving indigenous capacity building (Tipa and Welch, 2006). And though community based management seems to be more bent toward self-determination and autonomy, it does not address the discrepancies of management capacities amongst groups, and delegates an excessively formal format that assumes a common definition of community (as discussed in previous sections). Tipa and Welch's description of the collaborative form of co-management emphasizes power sharing, and flexible arrangements allowing self-description of community, and agreed upon norms and management structures. In this model, power sharing can be negotiated and adjusted, and traditional knowledge is respected and its use formalized in legally binding agreements.

The ERRP has elements all across this spectrum, which makes its placement difficult to locate. However, its flexible management structure between the two lead actors, and negotiated power sharing, suggests that it most closely resembles a form of collaborative co-management. However, the absence of an agreed upon structure, with transparent rules and norms, places vague expectations on each entity, similar to a cooperative arrangement. The government-to-government trust relationship between the Elwha Tribe and United States sets a foundation that goes beyond community-based management, as defined here. As a result of this analysis, the ERRP is placed closest to collaborative co-management, but slightly in the realm of cooperative co-management, though never quite achieving either (illustrated by the yellow circle on Figure 12).

In the case of the Elwha River Ecosystem Restoration Project, a unique opportunity presented itself for the Elwha Tribe, and their state and federal counterparts. Both the ONP and the Elwha Tribe strive to protect the natural environment of the Elwha watershed. This mission overlap aligned the two participants in the early phases of dam removal advocacy, and project

development. Conflict arose at times over differing perspectives on restoration and fisheries, but the long-standing relationship built trust and facilitated a venue where discords could be worked out, and progress continued toward the ultimate goal. An Elwha Tribe staff person summarized the outcomes of the co-management relationship at the Elwha:

“Overall, it’s been a great example of how entities can eventually find a way to work with each other. It’s important when you identify a problem to also identify a solution, one that is not just beneficial to one party. Try to find a solution that benefits both parties, with a give and take of each.” (Interview-3)

The long-term outcomes remain to be observed. The environmental processes will take some time to re-establish after the dramatic impact of the dam removal and sediment unloading, but technicians are optimistic that the river’s ecosystem will bounce back. Jack Sanford, fish

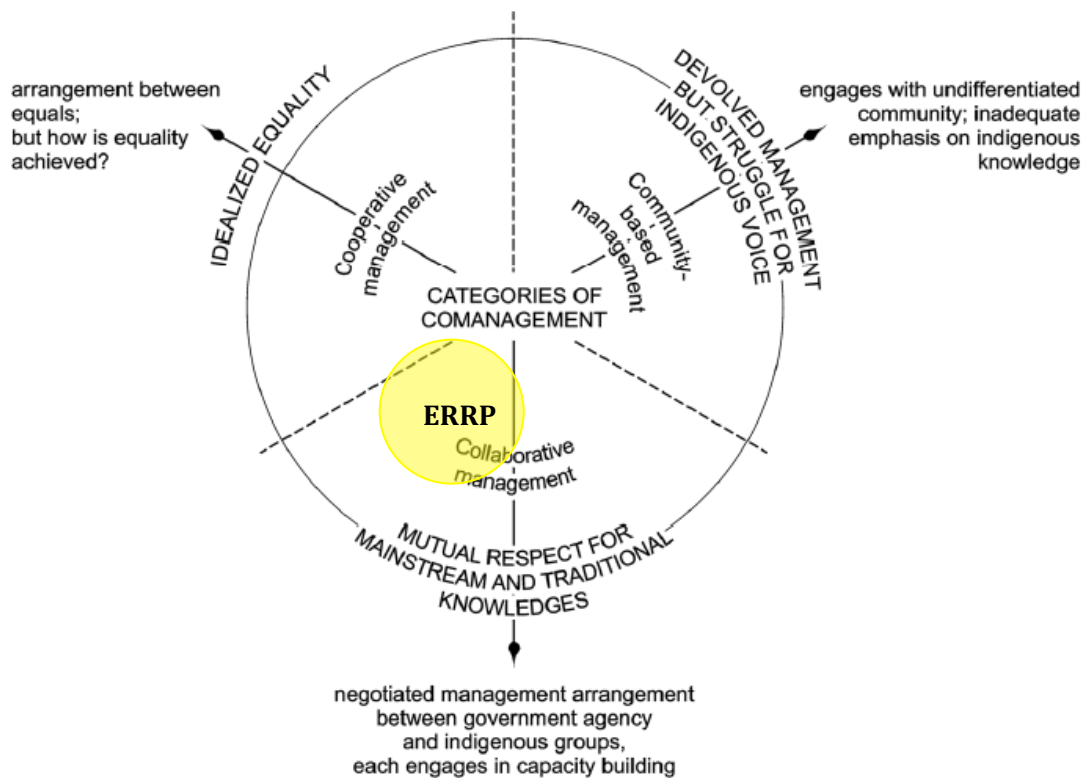


Figure 19: Categorization of ERRP co-management in Tipa and Welch’s (2006) framework for indigenous perspectives on cooperation, community-based, and collaborative categories of co-management

biologist from the Flathead Lake Biological Station, is quoted about the Elwha River salmon, ““Dams come out, the salmon respond. Simple as that,” (Mapes, Aug. 24, 2011). In similar fashion, the Lower Elwha Klallam people have lived by their own prophecy, made by a Klallam elder who was born in the early 1800’s and lived to the age of 100, “The Klallam people will almost disappear, but they will come back and once again be a strong people” (Wray, 2002, p. 32). This project will go down in history as glowing example of co-management between indigenous and government partners. It provides a positive mid-term case study of the progression since the Boldt Decision of 1974 toward real co-management in Washington State. Even though it does not contain all the pieces of what the co-management literature defines a la Berkes (1999), it is a pragmatist’s victory and a moment of pride those involved, both near and far. Elwha tribal elder Bea Charles commented in 2011, at the last first salmon ceremony before dam removal:

“When the dams went in it created confusion for the Salmon People. But now when the dams come down, they will once more go up, and be home. That is the great thing that is happening in our village. We are humbled and honored to be able to have the environment come back, we need to have the wildlife come back, the eagles, the beavers, eating off the salmon...It's about our ancestors and those before them, we are walking in their footpaths... These were the foods our people lived off. The fish people were beaten and arrested for, to provide food for the table. How do I feel? I don't even know, we have been talking and dreaming about this for so long, it's going to be history - not only for the Elwha Klallam tribal people, but nationally. We were always told it would never happen. It is going to be an overwhelming day. I think about all the work, the effort, over all the generations. It's a process of restoring what was lost.” (Mapes, Aug. 19, 2011)

LIMITATIONS AND FUTURE APPLICATIONS

This case study contributes to the body of literature surrounding collaborative environmental management and co-management with indigenous communities. Its unique characteristics provide additional evidence in supporting the existing theoretical frameworks on

those topics. It is hoped that this analysis will serve to inform further theoretical exploration in the field, as well as on the ground lessons for practitioners in natural resource management in the region. There are lessons from this case in both the way collaboration formed preceding dam removal and the way the federal entity approached its role in the co-management arrangement with the Elwha Tribe, with flexibility and adaptability. Co-management with Native American tribes in Washington State continues to change, and improve as mutual understanding expands, and legal frameworks are established. The ubiquity of tribes in the Northwest requires that co-management continue to improve, and as social capital and self-governance capacity amongst the tribes improves, it is becoming more and more the case that tribes and government are mutual partners, with equal contribution in the rapidly changing and advancing field of environmental management. Evidence from this study has shown that co-management and consultation requirements remain highly variable and with inconsistent practice across agencies. There is a pressing need for mandated and enforceable co-management frameworks, with practical application for all government jurisdictions. Each tribe across the U.S. presents a unique personality and variable institutional structures and capacity. This requires that co-management frameworks be made specific and directly with each tribe where a relationship is necessary or requested. It is abundantly evident that the existing consultation frameworks established in response to EO 13175 do not go far enough, if put into practice at all. A skeleton framework for establishing co-management agreements and a means through which to collaborate will continue to improve the status of tribes, and further improve relationships with government partners.

The NPS and its leadership at the ONP maintained some level of self-awareness throughout the ERRP. It appears that these efforts, to keep perspective in light of the larger context of dam removal policy and treaty rights, enabled it to be nimble in its role. It recognized

opportunities when it had to lead and when it could delegate. This characteristic is impactful to the success of a collaborative management effort. The federal government especially must recognize its role and opportunities to relinquish some of its power in order to empower others. This case has demonstrated the positive outcomes of such efforts.

Due to time constraints, analysis of the cultural impacts of the ERRP for the Elwha Tribe remains unexhausted. It was a goal of this study to interview multiple Tribe members and colleagues in the regional anthropology field to fully understand and examine the likely long-term impacts of the Elwha River restoration on Klallam culture. Those perspectives were expressed to some degree in the interviews conducted and in the multitude of media articles on the topic, however firsthand empirical data are lacking.

Because the ERRP is still a work in progress, it is difficult to identify outputs and outcomes relating to the project impacts. Many of these will not be known for some time, especially in the case of the environmental outcomes of ecosystem recovery and the legacy of the project for Elwha culture.

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APPENDICES

APPENDIX A – INTERVIEW GUIDE

Interview Script: NPS-ONP Staff

Introduction/Opening Questions: Thank you; about me; research goal; honored to witness and take part

1. Can you describe the Elwha River ecosystem? What is the value of this ecosystem?
2. What is your involvement with the Elwha River Ecosystem Restoration Project? When did you become involved?

Specific Questions

Co-Management Establishment

3. Can you describe what you remember from the early stages of the project and the relationship between the NPS and the Elwha Tribe?
4. When was it clear that the collaborative relationship between the NPS and the Elwha Tribe was formalized, did it require an institutional process, or develop from an informal agreement? How?
5. What were the intentions or goals of the collaborative relationship when it was established?
 - a. Can you describe how those mutual goals were identified?

Co-management Process

6. What do you think of the co-management process between the NPS and the Elwha Tribe?
 - a. How have your thoughts or feelings about the co-management process changed throughout this project? Is working with the tribe different now than it was in the early stages of the ERP? If so, how do you think it has changed?
 - i. Do you know of any major events agreements that marked a change, or progression in the Park Service's relationship with the Tribe?
7. How do you view the Park Service's role, when it comes to sharing the management of this project? How do you view the Elwha Tribe's role?
8. Can you describe the co-management process between the NPS and the Elwha Tribe?
 - a. Can you describe the decision-making process?
 - i. How is traditional and cultural knowledge incorporated into project planning?
 - b. Can you describe how contracting decisions are made?
 - c. How are funds transferred for contracted projects? Who distributes the funds?
 - d. How is the co-management relationship conveyed to staff at the NPS, who interact with the tribe?
 - i. Is communication between the co-managers' staff mostly direct, or conveyed through liaisons? Is there someone people go to for guidance in working within the co-management arrangement?

9. Can you talk about how the differences in worldview between the co-managers affect the management of the ERP?
10. Can you describe the level of satisfaction with the co-management process among NPS staff?

Co-Management Outcomes

11. Can you describe how co-management affects your role, what is your interaction with the tribe?
12. What do you feel are the current and long-term outcomes of the co-management process in the ERP?
 - a. How has the co-management process impacted ERP management? Efficiency? Effectiveness?
 - b. How has and will the ERP have cultural impacts on the Elwha Tribe?
13. What are your overall impressions of the co-management process? Is it valuable?
14. Can you describe how you think the co-management process is contributing to environmental justice between the U.S. government and Native American tribes? Do you feel that the ERP, in particular, has been successful to that end?

End Interview: Summarize; anything else to add? Give contact info if more to add later, or questions

Interview Script: Elwha Tribe Resource Management Staff

Introduction/Opening Questions: Thank you; about me; research goal; honored to witness and take part

1. Can you describe the Elwha River ecosystem? What is the value of this ecosystem?
2. What is your involvement with the Elwha River Ecosystem Restoration Project? When did you become involved?

Specific Questions

Co-Management Establishment

3. Can you describe what you remember from the early stages of the project and the relationship between the Elwha Tribe and the NPS?
4. When was it clear that the collaborative relationship between the NPS and the Elwha Tribe was formalized, did it require an institutional process, or develop from an informal agreement? How?
5. What were the intentions or goals of the collaborative relationship when it was established?
 - a. Can you describe how those mutual goals were identified?

Co-management Process

6. What do you think of the co-management process between the Elwha Tribe and the NPS?
 - a. How have your thoughts or feelings about the co-management process changed throughout this project? Is working with the tribe different now than it was in the early stages of the ERP? If so, how do you think it has changed?

- i. Do you know of any major events agreements that marked a change, or progression in the Park Service's relationship with the Tribe?
- 7. How do you view the Elwha Tribe's role, when it comes to sharing the management of this project? How do you view the Park Service's role?
- 8. Can you describe the co-management process between the Elwha Tribe and the NPS?
 - b. Can you describe the decision-making process?
 - i. How is traditional and cultural knowledge incorporated into project planning?
 - c. Can you describe how contracting decisions are made?
 - d. How are funds transferred for contracted projects? Who distributes the funds?
 - e. How is the co-management relationship conveyed to staff, who interacts with the NPS?
 - i. Is communication between the co-managers' staff mostly direct, or conveyed through liaisons? Is there someone people go to for guidance in working within the co-management arrangement?
- 9. Can you talk about how the differences in worldview between the co-managers affect the management of the ERP?
- 10. Can you describe the level of satisfaction with the co-management process among the Tribe/staff?

Co-Management Outcomes

- 11. Can you describe how co-management affects your role, what is your interaction with the NPS?
- 12. What do you feel are the current and long-term outcomes of the co-management process in the ERP?
 - a. How has the co-management process impacted ERP management? Efficiency? Effectiveness?
 - b. How has and will the ERP have cultural impacts on the Elwha Tribe?
- 13. What are your overall impressions of the co-management process? Is it valuable?
- 14. Can you describe how you think the co-management process is contributing to environmental justice between the U.S. government and Native American tribes? Do you feel that the ERP, in particular, has been successful to that end?

End Interview: Summarize; anything else to add? Give contact info if more to add or questions

APPENDIX B - ELWHA CITIZEN ADVISORY GROUP REPORT

Conclusions & Recommendations

April 30, 1996

- 1) Pursue immediate acquisition of the projects from James River and place these projects in federal ownership.
- 2) Create an Elwha River restoration fund to finance restoration activities to be funded with power revenues from the operation of the projects, fees from Olympic Park visitation, grant revenues from non-federal resources, proceeds from sale of project lands and federal appropriations.
- 3) Begin an immediate restoration of Elwha River salmon stocks. The highest priorities are Elwha Chinook stocks that are at a critically low abundance.
- 4) Implement a restoration strategy for the Elwha ecosystem with milestones to ensure fiscally responsible solutions and to verify dam removal feasibility, salmon stock restoration feasibility, and protection of critical water supplies.
- 5) Assure no net loss of private property (or property tax base) resulting from project acquisition by utilizing land exchanges or by disposing of project lands (or equivalent value federal lands elsewhere in Clallam County).
- 6) Maintain public access to the Elwha River corridor after project restoration through project lands.
- 7) Finance dam removal through the following: (1) federal operation of the dams for profit, (2) sale or trade of project lands, and (3) earmarking a portion of Olympic National Park receipts for use of the Fund.
- 8) Segregate the restoration effort into several phases including phased removal of the two dams. After the Elwha Dam is removed, study the impacts of removal and gather empirical data to determine whether to remove Glines Canyon Dam at a later date.