

'DO GOOD THINGS FOR THE FISH':
ORGANIZATIONAL INNOVATION IN TRIBAL GOVERNANCE

by
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I alone am responsible for any errors and omissions remaining in this work.

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ABSTRACT

This dissertation examines the organizational aspects of fish and wildlife management for Native American nations. Fish and wildlife management is an arena of great importance to many Native nations in subsistence, economic and cultural realms. Additionally, fish and wildlife, being common-pool resources, offer interesting management challenges. My research focuses on what happens when Native American nations exercise self-determination in this arena which requires them for both political and practical reasons to interact with state and federal governments and for economic reasons to deal with markets, all while attempting to meet the needs of their nations. Using fuzzy-set qualitative comparative analysis and drawing upon survey and case study research with Native American fish and wildlife programs, I examine how tribes manage their fish and wildlife resources and with what results.

This research helps identify under what conditions tribes may achieve various management goals. In some important ways, tribes are limited in what they can do, particularly in regards to land base size and degree of jurisdiction over non-Indians. More importantly, however, this research identifies some of the many ways tribes can work to take charge of or support tribal fish and wildlife management without having to appeal to outsiders. While there are some very real limitations to fish and wildlife management external to tribes, within those limits, tribes have opportunities to assume and be effective in resource management.

This dissertation also provides evidence to suggest that as tribes are better able to determine their own management and governance paths, elements of clan structures and

logics develop where the organizational literature would predict they would not. Studying tribal fish and wildlife programs in particular offers an examination of these clan-like features typically found only on the societal fringes. Perhaps even more importantly, this dissertation research demonstrates that there are different governance structures, or logics, co-existing and operating in hybrid forms. For tribes, these hybrid structures create some challenges and inconsistencies that more pure governance structures would not. Nevertheless, these hybrid structures also allow for flexibility and effectiveness in responding to the diverse stakeholders invested in or influencing tribal fish and wildlife management.

CHAPTER ONE: INTRODUCTION

Brief Introduction

In recent decades, there has been a resurgence in Native American nations' efforts towards self-governance and self-determination, and federal Indian policy has also shifted in direction towards this end (see Cornell 1988; Wilkinson 2005). The issues that remain are not related to whether Native nations desire to or can exercise sovereignty, but rather how they may approach the task. With the enormously complex political, economic and social histories of Native Americans over the past several centuries, there is certainly no simple unilateral path that will suit such a diverse group of people with varying strengths and challenges. Many tribes are making significant gains in exercising their sovereignty, but this progress is not achieved to the same degree or in the same way by all. Extensive work from the Harvard Project on American Indian Economic Development and the Native Nations Institute documents the success stories from Indian Country that support true self-determination. This research and others from the past 20 years offer enormously important insight regarding some of the key elements for nation-building. The literature covers an impressively large range of governance arenas, and an understanding of natural resource management, particularly fish and wildlife management, is a necessary inclusion. Fish and wildlife may be of enormous importance to Native American nations for cultural, subsistence or economic reasons, and the management of both relies on and furthers tribal self-governance.

Concomitantly, natural resource management in general is becoming an increasingly important area of inquiry as awareness of and concern for the natural environment has become commonplace in recent years. As an example, public and political attention has finally caught up with scientific and academic concern for global climate change and the myriad associated issues that result from or compound the phenomenon. One particular growing and thriving line of theory and research focuses on specific kinds of natural resources called common-pool resources, of which fish and wildlife are one type.

In light of the complex legal, political and cultural landscapes in which Native American nations attempt to manage their resources, this dissertation examines organizational and institutional aspects of Native American fish and wildlife management. With a better understanding of how governance structures meet or neglect various institutional needs, this research offers new insights to organizational and common-pool resource theory. This research also provides an opportunity to more closely examine the relationship between natural resource management and tribal self-determination. Further explanation of the rationale for this dissertation research as well as an introduction to Native American fish and wildlife programs and the contexts in which they operate are presented below.

Understanding Tribal Sovereignty

Native American tribes have historically been independent, self-governing societies with governmental forms that served the same purposes for which governments exist today, providing a means for social control, enabling collective action, and offering

mechanisms for dispute resolution (Cohen 2005; and see Burch 2006; Champagne 1992; Cornell, Curtis and Jorgensen 2004; Fowler 2003; Hoebel 1988; Lange 1968; Miller 2001). Although fairly informal and rarely written, these often complex governing institutions served necessary purposes for the existence of these societies. European nations and later the United States recognized Native American nations as “distinct, independent political communities retaining their original natural rights as the undisputed possessors of the soil from time immemorial...with the single exception of that imposed by irresistible power” (*Worcester v. Georgia* 1832). Indian tribes’ rights to self-govern come from inherent tribal sovereignty, existing apart from any delegated rights negotiated with or granted by the various colonizing powers, and from recognition of rights by the U.S. federal government as reflected in the U.S. Constitution, treaties, federal legislation, federal judicial decisions and so on (Cohen 2005; see particularly *U.S. v. Wheeler* 1978).¹ Over time, some of these rights have been explicitly taken away from tribes while others have been affirmed. Overall, while tribes retain substantial degrees of self-determination and self-governance, treaties and other negotiations with the United States, as well as U.S. military power, have placed Native American nations under a substantial degree of federal authority (Pevar 2004). That tribes negotiated treaties with the United States (and earlier, with other nations), is an indication of their sovereign status. However, support for tribes to engage in government-to-government relations often was self-serving, being a legal means to negotiate away properties or rights from Native American tribes. Indeed

¹ For example, in the U.S. Constitution, Indian nations’ rights as sovereign entities are stated explicitly in two areas. In the Indian commerce clause, the United States is permitted to negotiate commerce with Indian tribes in a similar fashion as with foreign nations. Also, statements regarding the absence of federal rights to tax Indians exclude Indians from the group of “free persons,” indicating tribal citizens are citizens of other sovereigns (Cohen 2005).

the famous trilogy of Supreme Court decisions by Chief Justice John Marshall in the 19th century at once affirmed tribal sovereignty while using it as support for subsuming Indian nations within the United States political powers (Getches, Wilkinson, and Williams 2005).

Later in this chapter a brief historical overview of federal Indian policy, including a discussion of the devastating effects of westward settlement and federal policy on the self-governing institutions of the tribes, is presented for setting the broad legal context in which tribes have sought to survive and achieve their goals. Federal Indian policy can be divided into general historical periods. For the moment, let us jump to the present day state of tribal sovereignty. The period of self-determination began in about 1968 and continues to be the dominant framework for federal policy today. Following a period of attempted termination of Indian nations, federal policy made a dramatic switch towards acknowledging tribal sovereignty and the right for nations to determine the course of their own futures. President Johnson in 1968 stated, “We must affirm the rights of the first Americans to remain Indians while exercising their rights as Americans. We must affirm their rights to freedom of choice and self-determination” (see Presidential Documents 1970:343). Therefore, policy enacted over the past few decades has attempted to support the building of tribal governments’ capacity, particularly through economic restructuring, educational support and natural resource protection. Among many notable pieces of legislation is the Indian Self-Determination and Education Act of 1975 which enables tribes to themselves administer important federal services on reservations including education, law enforcement, healthcare, natural resource

management and others.² This act was followed by the American Indian Religious Freedom Act of 1978, the Indian Child Welfare Act also of 1978, the Indian Tribal Governmental Tax Status Act in 1982 and the Indian Gaming Regulatory Act of 1988—all with the intent and effect of promoting tribal self-governance and self-determination. This period has also seen the restoration of the legal status of many tribes which had previously been terminated. Through an executive order, in 1994 President Clinton required all federal agencies to interact with Indian tribes on a government-to-government basis in recognition of their sovereignty and in 1998 reaffirmed “the right of Indian tribes to self-government” (Presidential Memorandum 1998:27655).

However, this shift in support is relatively new and as dramatic as any along the dark and windy historical path federal policy has taken. As Stephen Pevar, legal scholar for the American Civil Liberties Union, states, “In light of the radical and sudden changes that have occurred in the past, the future of federal-Indian relations is impossible to predict. Today’s era of self-determination can become tomorrow’s era of termination” (2004:13). Indeed political and public backlash waits around the corner with every step towards self-determination. For example, proposed federal legislation in 1995 would have undermined and eliminated many of the programs created during this period (Pevar 2004). Non-Indian, anti-sovereignty groups reemerge in search of control over Indian resources. The federal courts have also not been favorable in recent years: Getches (2001) is highly critical of the Rehnquist court, citing systematically analyzed evidence that demonstrates the U.S. Supreme Court fails to protect the rights of minorities,

² The Indian Self-Determination and Education Act is Public Law 93-638, discussed at length in other sections of this dissertation.

supports the interests of states, and upholds mainstream American values. Even with new mandates for federal programs to support tribal self-governance, the long history of poverty, land dispossession, and cultural colonization have drastically affected Native nations. The challenges that remain for Indian nations are significant.

Yet success stories and systematic research from Indian Country suggest there is also much reason for hope. The progress made during the self-determination era has offered the first real opportunity for positive change in over a century. The Harvard Project on American Indian Economic Development and its sister institution the Native Nations Institute (NNI) and others have documented the complex picture of success across tribes on their own terms, and this extensive research has led to a much greater understanding of what works where and why in the tribal effort to control their own affairs.

Cornell and Kalt (1992) define political sovereignty as “the extent to which a tribe has genuine control over reservation decision-making, the use of reservation resources, and relations with the outside world” (8). Key findings from the Harvard Project and NNI demonstrate that sovereignty is necessary for sustainable tribal economies and communities. When “outside” agencies are responsible for administering programs to tribes—however well-meaning they may be—these services will reflect the agendas of the outside agencies: “In the case of the BIA, for example, bureaucratic standards of success (protecting a budget, expanding authority) will tend to be given more weight than tribal standards of success. But when BIA or other federal decisions lead to lost opportunities or wasted resources, the costs are borne most directly by the affected tribe,

not by the federal bureaucracy” (Cornell and Kalt 1992:15). One reason tribal programs have a greater likelihood of success is that the connection between decision-making and its consequences is shortened and explicit. This has been evidenced in many arenas. For example, in a study of over 70 tribes with forest resources, Krepps (1992) found that an increase in tribal control transferred from the BIA also led to striking increases in forest productivity, worker productivity, and wages as well as a decline in production costs.

While tribal sovereignty depends in large part on federal Indian policy—policy that is currently, if tenuously, encouraging tribal self-determination—it is up to the tribes themselves to *exercise* this sovereignty, and sovereignty alone is not enough. The rights that come with sovereignty are important in and of themselves, but understanding how to use to those rights to meet their goals is also important. Tribes—or any governments—need effective *institutions* through which to exercise that sovereignty and best govern for the good of their people. (For examples of this work, see Adams 2000; Cornell and Gil-Swedberg 1995; Cornell and Kalt 1992, 1997a, 1997b, 2000, 2003, 2007; Harvard Project on American Indian Economic Development 2008; Jorgensen 2000, 2007; Krepps and Caves 1994; Lemont 2006; Record 2008; Wakeling et al 2001). This now solid body of literature provides a compelling argument for understanding governance institutions and their relationship to tribal self-determination.

Tribal Sovereignty and Natural Resource Management

In the 1983 Supreme Court case *New Mexico v. Mescalero Apache Tribe*, the right of Native American tribes to control management of fish and wildlife on tribal lands was confirmed. Prior to this landmark case, there was uncertainty over whether those hunting

or fishing on tribal land could be subject to state regulation. The significance of this case has several dimensions. Obviously, it has consequences for tribal self-determination and sovereignty. State control of tribal fish and game displaces tribal control and is one of various ways that states have sought jurisdiction over Indian communities and resources. In some instances, the case may have considerable economic significance for both Indian nations and non-Native governments: fish and game are potential sources of tribal income through recreational hunting and tourism; they also are used for subsistence in some Native communities. The case also has cultural significance for many Indian nations for whom fish and wildlife are not only economic resources but cultural resources as well. More broadly, it can be viewed in terms of environmental justice: at issue is the ability of communities—in this case, severely disadvantaged ones—to control the natural resources and environmental quality on which, in various ways, they depend.

As referenced above, there is now a growing body of systematic and rich literature on tribal governance. However, one arena of resource management understudied in light of this research is that of fish and wildlife. When resources are plentiful—particularly due to the absence of development and industry—natural processes along with locally derived cultural norms typically take care of the health of an ecosystem including the wildlife and fish within it.³ A need for formal, institutionalized management only arises with cultural, political and ecological changes that modern times have brought to most areas of Indian Country. Management which requires formal institutions has largely been a consequence of non-Indian encroachment on Indian lands

³ For a rich discussion of the relationship between Native Americans and environmentalism as well as representations of this relationship, see Harkin and Lewis 2007.

including federal or state fish and wildlife management practices, despite the best intentions in some cases. For Native nations like the Confederated Salish and Kootenai Tribes of the Flathead Reservation, this need was realized many decades ago. For others, such as the Red Lake or Fond du Lac Bands of Chippewa, this need is relatively new. Nonetheless in recent decades most Indian nations have entered the formal management arena, attempting to manage their fish and wildlife to meet their own objectives. However, how they have approached management tasks and the effects of their efforts vary substantially, and to date, there has been no comprehensive or systematic attempt to determine which nations are involved in fish and wildlife management, how they are approaching the management task, and what the various outcomes are.

Cornell and Kalt (1992) argue that contrary to views often expressed in public discourse which suggest tribes must be economically independent before they can attain true sovereignty, their research finds sovereignty is key to economic development and other kinds of goal attainment and must be exercised at least to some extent prior to these endeavors. Legal sovereign status opens up opportunities for commercial hunting and fishing and other areas of fish and wildlife management; and it places management decisions in the hands of those who will experience most directly the consequences of those decisions (Cornell and Kalt 1992). At the same time, the research in this dissertation demonstrates that good stewardship of fish and wildlife resources and programs supports an image and pattern of management competency that can spill over into other areas. Tribal management of fish and wildlife is an assertion of tribal sovereignty, and natural resources such as fish and wildlife also serve as one of the most

accessible and important arenas in which to assert sovereignty, providing opportunities for management in other arenas.

Similar to state control of tribal fish and wildlife displacing tribal control, federal control through the BIA or the U.S. Fish and Wildlife Service also takes decision-making power away from tribes and undermines tribal jurisdiction. When tribes decide and are able to manage their own fish and wildlife resources, they are asserting their rights as sovereign entities. Sometimes this assertion rests on treaty-reserved rights to hunt and fish. However, treaty-reserved rights in no way guarantee tribal control, nor do they instantly produce competent and self-governed management institutions. Tribes with effective management display a wide variety of proactive behavior that can make-up for or exert treaty-reserved rights—from listing their own sensitive and protected species to enforcing their own regulations despite state opposition to suing the state or the U.S. Fish and Wildlife Service to lobbying Congress in Washington, D.C.. Proactive behavior is an assertion of sovereignty; such tribes are not waiting around for the state or federal government to tell them how their resources should be handled but are attempting to meet their own needs on their own terms.

Developing fish and wildlife management programs is also an opportunity to assert sovereignty beyond a natural resources context. Although the resources are important in themselves, sovereignty broadly is even more important. This may be illustrated by cases in which tribes have withdrawn from inter-tribal alliances when they felt their sovereignty was compromised, despite the many benefits for resource management these alliances can offer. Additionally, some tribes that are managing their

own fish and wildlife are struggling in those efforts, but the opportunity to attempt effective management is more important to them than allowing the state or federal government to supplant tribal authority regarding fish and wildlife matters. The importance of sovereignty is also supported by tribes' concern with external perceptions of management: for some tribes hunting and fishing regulations, conservation officers, and tribal court hearings on fish and wildlife cases act in some ways as a means for state and federal governments as well as non-tribal individuals to view the tribal management program (or the tribe) as a competent and legitimate authority—the opposite perception is deeply threatening not only to tribal natural resource management but to broader issues of jurisdiction and sovereignty as well. These aspects of management organizations serve a valuable role for tribes—even if the role is not necessarily one of fish and wildlife management, but one of creating a presence of authority. In these cases, management of the resources may not be as important as is appearing to manage (or consequently actually managing) in order to keep outsiders at bay.

Understanding Management Institutions: Common Pool Resource and Organizational Theory

Understanding how tribes have regained control over their fish and wildlife resources and the effects of tribal management speaks to a growing body of literature on common-pool resources (CPRs). Common-pool resources are a particular type of resource because each is “a valued natural or human-made resource or facility that is available to more than one person and subject to degradation as a result of overuse” (Dietz et al. 2002:18). This susceptibility to overuse presents special governance

challenges that are not of concern in other types of resource management, and if these challenges go unresolved, they could lead to complete elimination of the CPR. In the face of uncertainty regarding others' use of the resource, each individual actor is motivated to draw upon the resource pool before others do so. By withdrawing resources in anticipation of an ever-decreasing common pool, actors could contribute to what would seem to be an inevitable depletion. This worst-case scenario was dubbed "the tragedy of the commons" by Garret Hardin in an alarming 1968 article in *Science*. The tragedy of the commons, according to Hardin, is that the ultimate end for common pool resources is resource elimination, and the only way the tragedy can be avoided is for an external outside force to impose order onto resource users through rules and regulations (1968). Fish and wildlife as well as other natural resources such as lakes, atmospheric gases, and forests—unless privatized—are common pool resources.

Policy shifts in the 1960s and 1970s in both the United States and around the world reflected Hardin's fear whereby "freedom in a commons brings ruin to all" (Hardin 1968:1244) and were supported by resource economists who argued for single owners of commons resources—whether this meant a centralized government or privatization. Commons research since that time has illustrated the often disastrous effects of these policies and management forms that only recognize single ownership as a means to address problems of the commons (Dietz et al 2002). However the 1970s were the beginning of a different trend in Indian Country, a move towards tribal self-rule that began the self-determination era, introduced above, which continues into today. New research on common-pool resource management, particularly in Indian Country, is timely

and important because nearly every developing country in the world has recently decentralized institutions that govern environmental management in order to localize them and make them more effective, and an overall trend towards devolution in the United States has also followed suit (Cornell and Taylor 2000). Furthermore, while self-governance may be desired by all American Indian nations, research suggests some nations are much more successful at achieving true self-rule than are others. For many Native American nations, natural resources such as fish and wildlife—common-pool resources—are central to their identity as a tribe, and control over such resources is key to their sovereignty as a people.

In addition to “the tragedy of the commons,” two other models predict similar ends for CPRs. Hardin’s tragedy has been formalized into the prisoner’s dilemma game (Dawes 1973; Dawes 1975). Unlike the absence of certainty among actors in the tragedy model, in the prisoner model each actor possesses complete information. That is, they are aware of all potential paths of action and the outcomes associated with each path for all actors. In a two-person prisoner’s dilemma game, if both actors cooperate, overall benefit is maximized. However, communication is either forbidden among actors, or if communication is possible what has been communicated is not considered contractual. Under these conditions, if one actor would cooperate while the other actor would act in his/her own best interests, the cooperating actor would completely lose. Therefore, this model predicts that each actor chooses the optimal strategy for themselves, and the overall result is less than ideal for the collective. The fascinating paradox here is that individually rational actions do not produce collectively rational results (Ostrom 1990).

A related perspective on the ability of groups of individuals to act in their collective best interests comes from Mancur Olson's "The Logic of Collective Action" (1965). Olson claims that the common good will not be pursued unless the groups are very small or there is some form of coercion or an outside force pushing individuals to act for overall group benefit. Otherwise, once common goods are produced or available, there will be no incentives for individuals within the group to maintain them, and free-rider problems will abound (1965).

Over the past few decades, CPR research has challenged these models that assume individuals will always act out of uncertainty in short-sighted, self-interested ways and that CPRs must be managed—or even *can* be managed—by a central authority from outside. This scholarship has attempted to identify common factors that are present where tragedies of the commons or free-riders were avoided. A wide body of CPR literature has shown that Hardin's fears may be valid in a narrow context, particularly where decision-making about utilizing resources occurs just once, and actors cannot or do not communicate. However, when communication is open, the interactions are repeated, or there is no determined end-point, we should not necessarily expect a tragedy of the commons (see Axelrod 1984). Individuals do not always choose to defect, but rather their cooperation depends upon a number of factors including their individual bargaining power, the abundance of the resource, and the actors' shared values, among other things (Dietz et al 2002). Runge (1981, 1984a, 1984b) has found that in developing countries, where individuals have lived and expect to live where their own families have lived for generations and where poverty is high and alternatives to the common-pool resource are

scarce, actors are not driven to become free-riders. Instead of a one-time prisoner's dilemma game, this situation involves more of a repeated coordination problem in which all actors would like to limit their own use if assured others are doing the same. Other scholars argue that at the least local knowledge, customs, and practices must be incorporated into any system of central governance that hopes to succeed (see Scott 1998). In some cases, local control has proven to be essential to maintaining a sustainable common pool of resources (see Berkes 1989; Bromley and Feeny 1992; McCay & Acheson 1987; Tang 1992). However, formal training in scientific management of natural resources has been based on a top-down approach to resource management, and policy analysts also tend to believe in the ability of authority figures to guide appropriately from afar (Acheson et al 1998; Ostrom 1999; Sherman & Laughlin 1992).

Therefore, a central debate within resource policy and management and CPR literature concerns the value of decentralization of power. A key focus of scholarship has been on identifying under what conditions local control works for the sustainability of the resource. While a theoretically compelling area of interest, this is also increasingly raised as issues of resource depletion and best management practices must be addressed across academia, policy centers, and governments, particularly in the face of global climate change and the effects thereof. Agrawal and others now call for identifying the lessons learned from the wide body of CPR literature that "are sufficiently reliable to help diagnose institutional malfunctioning" and to use that information to promote equality and justice in resource management (2002:46).

Scholarship on Native nation governance and insights from organizational sociology may help. Although the CPR literature tends to focus on commons in developing nations, as mentioned above, scholarship from the Harvard Project and NNI has focused on the role of institutions in governance, and these findings are echoed by CPR literature (see Ostrom 1992 for a classic). Organizational scholars identify institution-building as “those conscious efforts to direct societal change and to search for more effective social controls which are grounded in rationality” (Janowitz 1978:400) and remind us it is essential to consider that institution-building happens within the context of larger institutions (Jepperson 1991). For tribal fish and wildlife programs, institution-building at the program level happens within the larger context of the tribal government and all the historical, cultural and legal factors that have shaped this particular institution. The roles, sanctions and ideologies that make up an institution are formed in relation to the larger social institution and to the sanctions that that larger institution may place on any efforts to regulate actors in the new institution (Galaskiewicz 1991).

Classic organizational theory defines formal organizations as groups of individuals working together under a common understanding of group goals (see Blau and Scott 1962). Few organizational scholars accept such a simplistic definition of formal organizations, and Ouchi (1980) goes further, building on Williamson’s work with transaction cost analysis in an attempt to delineate different forms of organizations which may not necessarily be composed of individuals working towards common goals (see Williamson 1973, 1974, 1981). Ouchi develops criteria to measure conditions of

organizational efficiency in an effort to predict organizational form given certain circumstances. Doing so, he distinguishes between markets, bureaucracies, and clans as forms of governance structures. He suggests that each form responds to differing levels of goal congruence and requires different operating mechanisms to help achieve those goals.

The organizational types within transaction cost theory—markets, bureaucracies and clans—differ from each other on scales of both performance ambiguity as well as goal incongruence (Ouchi 1980). A market that is functioning efficiently is a form of governance structure in which performance ambiguity is low but goal incongruence is high. That is, actors within a market know the performance roles for themselves and others—such is the nature of a market in which relationships are contractual; however, the goals of individual actors are distinct. Elements of market structure among tribal fish and wildlife management operations can be seen, for example, in arrangements between hunting guides and clients at San Carlos or in contractual relationships for non-Native employees working for tribal programs like those with the Confederated Salish and Kootenai Tribes. However, market structure is rare among these organizations.

According to Ouchi, under conditions in which actor relations cannot be completely contractual, performance ambiguity increases, a pure market form fails, and a Weberian-type bureaucratic structure develops. Goal incongruence decreases in bureaucracies from the market form, as actors within the organization come to trust one another and see payoffs from collective efforts directed towards similar goals. Therefore, within an efficient bureaucracy, both performance ambiguity and goal incongruence are

moderately high. The best examples of ideal-type bureaucracies for fish and wildlife management come from state and federal agencies where tasks are highly specialized, there is a strong rational orientation to work processes, and there is a clear hierarchical order of authority. Surprisingly though, many tribal management organizations also display elements of bureaucracies—governance structures the common-pool resource literature would not predict would be found in effective organizations as CPR research has identified these as being made up of small groups of interdependent and homogeneous individuals with shared norms working through locally devised, simple rules (see Agrawal 2002).

The third form of governance structure described by Ouchi is that of a clan, a form that functions efficiently under the opposite conditions as does the market. Although Ouchi extended Williamson's arguments about transaction costs several decades ago, little attention within organizational research has been given to clans (see Williamson 1981). Clans are cases of Durkheim's organic solidarity (1933) in which individuals are necessarily interdependent; goal incongruence is low as all members mutually depend upon the collective goal and are generally socialized into a system in which this is clearly recognized and sought. However, in clan forms of organizations, performance ambiguity is high as individuals' tasks are "unique, completely integrated, or ambiguous" (Ouchi 1980:134). These characteristics can easily be found throughout Indian fish and wildlife programs. For example, high performance ambiguity is illustrated by the fact that most employees of tribal management programs have a wide variety of responsibilities and skills—directors do leg-work, dispatchers do security, and

game wardens do drug busts; with so many staff performing such a variety of tasks, these departments do not need to be as hierarchical as their federal or state counterparts in more bureaucratic organizations. Tribal managers or enforcement officers can go directly to the head decision-makers (usually the tribal council) to potentially address issues immediately. This also means that tribal programs are much more flexible than federal or state departments. There is a lot more “wobble-room” to try new management practices or adopt new programs; there seems to be recognition that there are several ways to achieve the overall goals, and employees are given a lot of discretion to experiment with those efforts or to attempt something interesting to them.

Low goal incongruence indicative of clan-like organization is also illustrated across these cases. All tribal programs strive to employ tribal citizens; tribal citizens that work for the tribal management programs have clearly been socialized to be Apache or Crow, for example, and understand not only the program/departmental goals, but more broadly the values and goals of the tribe itself throughout their lifetime. Non-citizen employees are not socialized from birth, but must quickly learn the rules, norms and values of the tribal culture in order to remain in their positions as tribal employees. Those non-citizen employees that do remain, in addition to tribal citizen employees, display an extraordinary level of dedication to the tribe, to the fish and wildlife programs and to each other.

For Native nations there is not only a strong tradition of clan forms that for many tribes have carried over through history; there is also a contemporary tendency to function as a clan due to Native nations’ unique legal status within which Native peoples

must operate for their cultural, political and economic survival. Although some tribes are known for having lost most of their traditional features, these situations are lamented by tribes who retain clan elements and who work hard to preserve that organizational form. Having passed through numerous changes in federal Indian policy (described further below), tribes have entered a new era of self-determination. Cornell (1988) has detailed the political resurgence of Native nations and Wilkinson (2005) describes this at length as the “rise of modern Indian nations.” Sovereignty is on the agenda; tribal council members to third generation commercial fishermen have self-governance in the forefront of their minds. While the tribal leader may talk about lobbying the U.S. Congress and the fisherman may complain about dealing with state law enforcement while pulling in his gill nets on the river, the same goal of tribal independence is widely shared by citizens of these Native nations.

Subsistence hunting and fishing also bind Native people together in a way that is related but not identical to sovereignty itself. If you and your neighbor—who is also your cousin—cannot buy groceries for your family until the next paycheck with which you will drive fifteen miles to shop—all other things being equal, you share some essential and strong common interests in the health of the wildlife population and citizen access to it in a way that a typical avid non-tribal hunter in Montana does not. If your great-great-great grandfather fished in the same spot you fish in everyday, just upstream from burial grounds that house even his grandmothers—and your fellow fisherman have a similar story—you share the experience of fishing access differently than even the most devout non-tribal angler who supports his local sportsman’s clubs and stream-access legislation.

Yet fish and wildlife programs do vary across tribes. Attempting to explain variation in tribal fish and wildlife programs requires an understanding of variation in the organizations that run these programs and the institutions and larger contexts through which they operate. Although most tribal fish and wildlife program cases tend towards clan-like structures, that elements of bureaucracies are present makes these hybrid organizations unique as they try to respond to two structures simultaneously (and occasionally market structures show up as well). These combinations make these hybrid organizations unique. The intermixing of bureaucratic and clan-like structures within organizations produces inconsistencies and organizational challenges, as well as flexibility in responding to diverse organizational needs and radically different constituencies. Tribal fish and wildlife programs allow us to better understand how these complexities hinder and help tribes in their management efforts and complicate arguments surrounding local resource management effectiveness, and offer an opportunity to substantively expand both the CPR and Native nations governance literature.

Foundational common-pool research has also been recently critiqued for being too linear, evidenced by its lack of understanding of interactions between conditions (see Agrawal 2002). Using qualitative comparative analysis, it is possible to analyze these interactions in context, and tribal fish and wildlife management offers a unique opportunity to look at complexities of local control within a well-defined scope. Local management works well under certain conditions, along certain causal paths, and generally operates quite differently than state or federal management agencies. However,

not all effective tribal management organizations are alike, nor are they all entirely different from more centralized management organizations. Although the common-pool resource literature argues there is a significant distinction between local and centralized (more bureaucratic) institutions, some of the local tribal institutions incorporate bureaucratic organizing structures in addition to those associated with a clan type—thereby creating interesting organizational hybrids. Understanding how complex tribal organizations work may expand the relevance of the organizational structure typologies offered by transaction costs theory (see Williamson 1999) while illustrating how tribes are creating innovative institutions to meet their own management needs.

The Unique Historical and Legal Status of Native Nations

The indigenous societies of the United States share much in common with other colonized indigenous societies of the Western hemisphere (see Cornell 2006 for a nice comparison). In addition to American Indian nations, the First Nations people of Canada, the Maori of New Zealand, and the Aboriginal peoples of Australia all experienced colonization that used genocidal tactics. However, despite many similarities related to these experiences, the Native nations within the United States occupy a unique legal status vis-à-vis the federal and state governments. A brief history of federal Indian policy follows so that later analyses may be understood in light of this historical legal context. The two hundred year relationship between the United States and Native nations can be characterized by a series of dramatic reversals as the federal government enacted policy to match changing understandings of the role of Native nations in American society. Each of these directions brought with it specific consequences for the nations involved.

While it is important to remember that not all Native societies were identically affected by these policy shifts, generally federal Indian policy has brought about a dramatic reduction of Native land and natural resources, decreased the American Indian population, and inhibited traditional systems of governance. The policy shifts that have brought about these dramatic changes for American Indians from the country's start to today can broadly be categorized into six periods.

Prior to European arrival in what was to become the United States, approximately 500 nations existed in North America, each with its own language, culture and government. Religious beliefs centered on "the sanctity of nature" (Pevar 2004:1). Large-scale commerce between these nations spanned the continent. Relations between diverse Native groups and Europeans varied, although generally the Native Americans were hospitable and helpful to most visitors. Relations began to change when the visitors began to come in mass and appeared to have every intention of staying. However, having fought an exhausting revolutionary war with the British, the new Americans could not afford to continue battling, and "the Indian nations were militarily powerful and still a threat to the young United States" (Porter 1998:922). After the Revolutionary War, the official position of the United States was to regard Indian nations on equal footing with other foreign powers. Federal policy reflected this understanding of tribal sovereignty. The Northwest Ordinance of 1787 stated that "The utmost good faith shall always be observed towards Indians; their land and property shall never be taken from them without their consent" (as quoted in Pevar 2004:6). In 1790 and then 1793 Congress passed

various pieces of legislation prohibiting whites from taking or settling on Indian lands without permission.

Nevertheless, white settlers flooded Indian lands, taking possession by any and all means possible, and the federal government “usually overlooked the illegal taking of Indian land” (Pevar 2004:6). In the name of the public interest, under the newly elected President Andrew Jackson, the federal government began the period of “removal and relocation” that lasted from approximately 1828 to 1887. With a more economically and militarily powerful government, and with increasing pressure for the growing American population to move westward, the United States began to remove Indian people from desirable areas, particularly those with valuable natural resources, in both friendly and forceful ways. In 1830 the Indian Removal Act formalized this practice and most eastern Indian tribes were either forced to move west or to settle on significantly small reservations. During the removal period an estimated 60,000 people were forcibly removed from the southeast to Indian Territory—a land perceived to be far enough West to never interfere with a thriving Euro-American population in what is now Oklahoma—on what is known as the infamous “Trail of Tears” on which approximately 15,000 Indians died (Strickland 1980). Westward settlement was further fueled by the discovery of gold in California in 1848 and in the South Dakotan Black Hills in 1874. Eventually realizing that pushing Indians westward was only a temporary solution, particularly when the people were resistant, the latter half of this period is characterized by attempts at pacification and an effort to move Indian societies to designated reserved areas, or reservations. Settlers encroaching on Indian lands had increasingly come into violent

conflict with tribes, and attempts at pacification on reservations also served the purpose of obtaining lands for Euro-American settlers. Following the end of the Civil War—in which Indian societies fought on both sides—President Grant supported a “peace policy” and missionary control of Indian peoples. This is also the period of the most active treaty-making in the pacification and reservation efforts. Many tribes signed treaties with the United States, typically negotiating to retain rights in exchange for land. The United States eventually broke nearly every treaty it signed with Indian nations—sometimes almost immediately. However, Congress moved to end treaty-making with Indian nations in 1871, although federal tribal status could still be determined via executive order and statutory recognition. The removal and relocation period also encompassed the “Marshall trilogy”: a series of U.S. Supreme Court decisions named after Chief Justice John Marshall that were to forever set the tone for federal Indian policy. Although Justice Marshall was sympathetic to Indian interests, the court rulings were a mixed bag for Indian sovereignty, with the federal trust responsibility outlined and tribal status declared to be one of “domestic dependent nations.”

The “allotment and assimilation period” lasted from 1887 to 1934, beginning with the passage of the General Allotment Act (also called the Dawes Act) of 1887. This act was supported by two different groups: those that wanted access to more Indian land, and those that believed the best way to help relieve Indian poverty and other problems was to assimilate them into American society. Consequently, under the General Allotment Act, reservations were divided into parcels and transferred to individual Indians in an effort to promote entry into a market-based economy through small-scale

farming and an appreciation of private property. So-called “excess” parcels were sold to any interested buyers, typically non-Indians, and jurisdiction over these sections of land was removed from the tribe and placed in the hands of the state. Over time, many of the individual Indian parcels were also sold to non-Indians. Approximately 100 million acres of Indian land were lost to non-Indians through this process, and consequently most reservations originally established through treaties between a Native nation and the United States are today “open” reservations with a complex checkerboard pattern of ownership status. Although the Dawes Act did open up land to non-Indian settlers, it did nothing to alleviate the poverty among Indian nations. In 1924 all American Indians became citizens of the United States, also changing little of the dire economic and political situations of most Indian nations. In 1928 the Institute for Government Research (now called the Brookings Institution) issued what came to be known as the Meriam Report outlining the devastating conditions facing American Indians (Stahl 1979). In 1934 the General Allotment Act was repealed.

The Indian Reorganization Act (IRA) was passed in 1934, beginning the “Indian New Deal” and setting the stage for the period of reorganization and self-government lasting until about 1953. The Great Depression virtually wiped out non-Indians’ ability to buy Indian land, and the Meriam report awakened broad public criticism of federal Indian policy. President Franklin D. Roosevelt began the “Indian New Deal” and appointed John Collier—a longtime critic of federal Indian policy—as the Commissioner of Indian Affairs. Collier helped pass the Indian Reorganization Act (also known as the Wheeler-Howard Act) in an effort to reconstitute tribal governing bodies and protect

remaining tribal lands. It prohibited further allotment, restored land to some tribes that had lost all their land, and added land to some reservations. Furthermore, it encouraged tribes to adopt constitutions and become federally chartered corporations. Millions of dollars in grant money available to new IRA tribal governments motivated many to make these changes. The IRA also set a preference for hiring Indians in the Bureau of Indian Affairs in an effort to give more power to Indians to control federal policy directed towards Indian affairs. Essentially the intentions of the IRA drafters were to develop Indian self-government, although the IRA has been highly critiqued as a paternalistic approach because Indian people were not consulted in its creation or passing. It has also been critiqued for being insufficient as power remained in federal hands (Pevar 2004). Nevertheless, up until this point in history the IRA was the most significant positive piece of federal legislation for American Indians, resulting in the restoration of over two million acres to Indian Country, improved services in health care and education, and renewed tribal governments (Pevar 2004).

The period of reorganization and self-government ended in 1953 when President Dwight D. Eisenhower was elected. Following World War II and with significant war debt, in 1949 a report from the Hoover Commission declared that the federal government could save significant money by cutting federal Indian programs and again attempting to assimilate Indians into dominant American society. Based on the Hoover Commission's recommendations, Eisenhower began a new approach—that of termination, involving “termination of the tribe's trust relationship with the United States and, as a consequence, its loss of federal benefits and support services and the destruction of its government and

reservation” (Pevar 2004:11). Congress acted to end all federal benefits and services immediately and while this was purported to be setting the Indians free, it was enormously devastating to tribes across the U.S. One hundred and nine tribes’ trust relationships with the United States were ended and “each tribe was ordered to cease exercising governmental powers and to disperse all land and property to tribal citizens. Their reservations were then eliminated, and the state acquired full jurisdiction over this land and the people who resided there” (Pevar 2004:11). In 1953 Congress also passed PL-280 giving six states criminal jurisdiction over reservations.⁴ Such policies sent a strong message to those in Indian Country that the federal government could, at will, change the fate of their nations.

In 1968, once again there was a dramatic shift in federal Indian policy beginning with the election of President Lyndon Johnson and thus begins the period of self-determination that continues into today, discussed at the beginning of this chapter.

Tribal Hunting and Fishing Rights

Canby (1998) argues that “the most intense controversies in current Indian affairs are probably those concerning hunting and fishing” (419). Indian hunting and fishing rights are enormously complicated. Generally it stands that the establishment of a reservation by treaty, executive order or statute implies rights to hunt and fish free of state interference on that reservation (see *Menominee Tribe v. U.S.* 1968). Although tribes affected by PL-280 are generally under state criminal jurisdiction, the law makes an exception regarding hunting and fishing rights, leaving that jurisdiction to the tribes.

⁴ These states are Alaska, California, Minnesota (except for the Red Lake Band of Chippewa), Nebraska, Oregon and Wisconsin.

These implied rights have even withstood the termination of a federal trust relationship as was the case for the Menominee (again see *Menominee Tribe v. U.S.* 1968). Some tribes have additionally reserved rights through treaties to hunt and fish *off*-reservation in their “usual and accustomed places” free of state regulation (see *U.S. v. Winans* 1905).

These off-reservation rights are more easily upheld when the treaty language is explicit. Some treaties have language which may be interpreted as upholding only temporary rights. This was the case in the first Fort Laramie Treaty of 1851 with the Crow Tribe in which the Tenth Circuit interpreted “the right to hunt on the unoccupied lands of the United States so long as game may be found thereon” to indicate only temporary rights. The Eighth Circuit has more favorably interpreted this kind of treaty language, however, and its decision was upheld by the U.S. Supreme Court in *Milles Lacs Band of Chippewa Indians v. Minnesota* (1997) whereby the rights of the tribes to fish in their 1837 treaty ceded territory was not understood as temporary by the treaty-signing Indians. Consequently the Chippewa tribes represented in that case (including Fond du Lac) maintain rights to hunt and fish in all public and private land that is open to hunting and fishing. In contrast, language identical and similar to that in the Crow treaty inherently implies some temporality as lands are unlikely to permanently remain open. Regardless, whether interpreted as permanent or temporary, these rights are more protective than general aboriginal rights which may be quickly extinguished by the federal government in conjunction with or separate from aboriginal land title (Canby 1998).

On-reservation, tribes have the regulatory and adjudicatory power over Indians in hunting and fishing matters, on both tribal land as well as Indian and non-Indian fee lands. Some tribes have chosen not to or been unable to exercise this power. In matters where rights to off-reservation activities are upheld, tribes also have the power to regulate tribal citizens. Federal plenary power applies to these hunting and fishing rights extending all the way to completely abrogating rights as it did, for example, through the Eagle Protection Act (Getches, Wilkinson, and Williams 2005).⁵

States may also intervene in Indian hunting and fishing rights when they can establish a necessity to do so for conservation matters. This exception can come into play both on and off-reservation, although any attempt by the state to regulate tribal citizen on-reservation activities would technically have to demonstrate a strong and clear connection between on-reservation activities and off-reservation resources. The relationship between state authority and tribal hunting and fishing rights came to the forefront in a series of cases between the State of Washington and several treaty tribes, later involving the federal government as the trustee for the tribes. What led up to the litigation were competing tribal and state interests in salmon and steelhead trout in the Pacific Northwest and the state's attempt to regulate all parties involved. The Supreme Court decision in *Puyallup I* for the first time permitted some state regulation of Indian fishing rights, given they met "appropriate standards" (*Puyallup Tribe v. Department of Game* 1968). However, Washington regulations in effect continued to discriminate

⁵ The Eagle Protection Act is particularly inclusive. However, it does contain a provision for the Secretary of the Interior to permit certain activity "for the religious purposes of Indian Tribes" (Getches, Wilkinson, Williams 2005:326).

against Indians and in *Puyallup II* the Supreme Court ruled that any state regulations had to reasonably accommodate both Indians and non-Indians. Coincidentally, during the same period as these rulings, land that had been perceived to be off-reservation land was determined to in fact belong to the Puyallup reservation (even though by this time this area was owned by non-Indians as fee land). The tribe naturally argued that on these lands the state could not regulate tribal activities at all. In the third case of this series, the Supreme Court rejected the tribe's argument upholding the tribe's non-exclusive rights to hunt and fish and the state's right to regulate for conservation purposes. Therefore in summary, through the three Puyallup cases, the law shifted from states having no jurisdiction to regulate treaty fishing rights to intervening in both on- and off- reservation fishing matters when deemed necessary for conservation purposes. Yet the extent of the applicability of these decisions remained in question—particularly that of Puyallup III wherein the tribe's on-reservation rights were determined non-exclusive—due to the unique situation of the Puyallup tribe (Canby 1998).

Concomitantly the United States sued the State of Washington on behalf of seven tribes with similar treaty language regarding off-reservation rights. Judge Boldt in the District Court ruled that the tribes had the right to a 50% share in the harvestable fish run. This decision brought major backlash against the tribes, some of which was violent. Ensuing litigation led to the Washington Supreme Court ruling the state could not comply with the federal ruling. The federal district court responded by ordering federal oversight of the state fisheries to protect treaty rights. Finally in *Washington v. Washington State Commercial Passenger Fishing Vessel Association* (1979) the U.S. Supreme Court

rejected all of the Washington court's decisions. The Court outlined a series of propositions regarding Indian fishing rights and upheld the 50% harvest allocation. Essentially it supported the state's ability to regulate tribal fishing, but limited this power to imposing aggregate catch levels when necessary for conservation purposes.

This 50% standard has been applied to numerous subsequent cases, particularly in Washington and Oregon, but notably also in the Great Lakes in *Lac Courte Oreille Band of Lake Superior Chippewa v. Wisconsin* (1991) discussed later in this dissertation.

“Generally, state regulation of treaty fishing must be the least restrictive consistent with the necessary escapement of fish to preserve future runs; it must treat the treaty rights as co-equals to other uses; and it must accord the tribes a fair opportunity to take, by reasonable means, a fair portion of the fish from each run” (Canby 1998:437) (see *U.S. v. Oregon* 1985).

Up until now this discussion has been about tribal hunting and fishing rights both on and off-reservation. Tribal rights to regulate non-Indians over hunting and fishing matters on reservations presents another complexity altogether. The federal government, tribal governments and state governments all have interests in regulation. Clearly the federal government has the power to control on-reservation non-Indian activities, but has for the most part not done so, with two statutory exceptions: the federal trespass statute and the Lacey Act (Canby 1998). A non-Indian who trespasses on Indian lands to hunt or fish or intends to or actually does transport fish or wildlife off the reservation is subject to federal criminal jurisdiction. Individuals who engage in these acts may also be prosecuted in a tribal court, this not constituting double-jeopardy. However, with federal

wardens and federal attorneys overwhelmed with other cases, enforcement of these federal statutes on tribal lands is rare. In the absence of a comprehensive federal presence in these matters, tribes have the right to regulate non-Indian hunting and fishing activities on Indian lands. This was qualified in what has come to be known as a seminal case: *Montana v. United States* (1981). In *Montana* the U.S. Supreme Court ruled against the Crow Nation in regards to its rights to regulate non-Indian activity on non-Indian owned fee land within the reservation boundaries. Two exceptions (sometimes known as the “Montana exception rules”) include situations in which the non-Indian has willingly engaged in a consensual relationship with the tribe (such as through the purchasing of a tribal hunting permit or making a business contract) or when the non-Indian activity "threatens or has some direct effect on the political integrity, the economic security, or the health or welfare of the tribe." Since *Montana*, the courts have increasingly applied this decision to an expanding arena of jurisdictional issues including non-tribal citizens on trust lands, narrowing the application of the exception for tribal welfare (Cohen 2005).

Tribes have retained the right to regulate non-Indians on tribal trust land, but tribes lost *criminal* jurisdiction over non-citizens in *Oliphant v. Suquamish Indian Tribe* (1978). This necessitates civil language in tribal fish and game codes regarding non-Indian activities, making some forfeiture of property and other typically criminal regulatory actions seem odd. Although tribal law enforcement cannot arrest or hold individuals in custody as tribal enforcement, they can enlist the help of federal agents. Some tribal law enforcement officers are also cross-deputized federally and so can perform these actions as federal officers. However, for those tribes that rely on federal

agents outside of the tribal departments, enlisting their help may be a futile task as federal agents are typically overwhelmed with other (non-fish or wildlife) cases or simply too far away to be of immediate help. Therefore, tribes often find enforcement and adjudication of non-citizens regarding fish and wildlife matters inadequate. It is important to keep in mind, though, that tribes do for the most part retain the rights to exclude non-citizens from the reservation, and that the power to exclude is a greater power than the power to regulate—that is, if the tribe retains the rights to exclude it should also possess the lesser power to regulate non-citizens. The applicability of this relies in part, though, on how well the tribal fish and wildlife and trespass codes are written.

In some cases tribes and states have agreed to require both tribal and state permits for non-Indians on tribal land. In other cases, tribes have allowed—or at least not resisted—state regulation of non-Indians. However, for the most part, tribes have considerable interest in regulating non-Indian activity. Some of the most contentious jurisdictional battles between tribes and states regarding regulation of non-Indians have occurred when tribes have more open hunting and fishing regulations than do states—typically in an effort to attract non-Indian spending on these programs. While this has been highly contested, the rights of tribes to set their own regulatory standards for non-Indians regarding hunting and fishing on Indian lands was upheld in the landmark case *New Mexico v. Mescalero Apache Tribe* (1983). The Supreme Court stated:

Concurrent jurisdiction would empower New Mexico to supplant tribal regulations. The State would be able to dictate the terms on which nonmembers are permitted to utilize the reservation's resources. The Tribe would thus exercise its authority over the reservation only at the sufferance of the State. The tribal

authority to regulate hunting and fishing by nonmembers, which has been repeatedly confirmed by federal treaties and laws...would have a rather hollow ring if tribal authority amounted to no more than this.

This case was enormously significant because it confirmed the right of tribes to manage their own resources for their own purposes (some of which may be economic). Most formal tribal fish and wildlife departments have developed since the *New Mexico* decision.

Direction and Organization of the Dissertation

This dissertation examines fish and wildlife management, an arena that is extremely important to American Indian tribes as fish and wildlife can serve as subsistence, economic and cultural resources. These resources are both symbolic and tangible, and they speak to relationships in American Indian traditions and, in many cases, their present lives. My analysis focuses on what happens when tribes exercise self-determination in this arena that for both political and practical reasons forces them to deal with other governments and for economic reasons forces them to deal with markets. When tribes decide to manage their fish and wildlife under these conditions, what institutional forms does that management take? Classic Weberian thought suggests that as societies modernize their administrative structures will transition from clan organizations to more bureaucratic organizations, but do tribal management institutional forms follow what we might expect from the organizational and common-pool resource literature? In managing their own fish and wildlife populations, tribes demonstrate self-determination, resourcefulness and innovation in utilizing varying institutional forms to respond to management needs. How do these institutional forms and other conditions

relate to healthy fish and wildlife populations? How do these forms relate to economic revenue from fish and wildlife programs? Using qualitative and fuzzy-set qualitative comparative analysis and drawing upon survey and case study research with Native American fish and wildlife programs, I examine how tribes manage their fish and wildlife resources and with what results. Although there may be multiple pathways to any one outcome, this research identifies what conditions contribute to tribal self-determination through fish and wildlife management, and examines how various conditions, including institutional forms, contribute to meeting tribal management goals.

The dissertation is organized in the following manner: Chapter Two provides more detail about the data itself, data collection procedures and data analysis. Chapter Three offers a qualitative look at each of seven case studies of tribal fish and wildlife programs taking various approaches to meeting their natural resource and management needs. Chapter Four provides the fuzzy-set qualitative comparative analysis results of both the seven case studies as well as the survey cases, and Chapter Five discusses these results in light of the literature and relevance to tribal leaders and managers. Chapter Six focuses specifically on the organizational forms these tribal programs have taken and how various organizational structures might be applied to changing contexts and needs within tribal resource management. The last chapter concludes the dissertation by providing an overview of the theoretical and research implications of this research as well as by providing some policy and practical implications for managers, leaders and any others wishing to support tribes along their paths to self-determination.

CHAPTER TWO:
A REVIEW OF THE METHODS USED
IN DATA COLLECTION AND ANALYSIS

This chapter presents details of the data and methods used in this study. I first describe the way I collected the data for both the case studies and the survey. I then explain the qualitative and fuzzy-set qualitative comparative analyses, having employed a mixed methods approach increasingly utilized to improve the depth of understanding of phenomena (Creswell 1999; Denzin and Lincoln 1994; Klandermans and Staggenborg 2002).

Data Collection

Case Studies

There are currently 563 federally-recognized tribal governments. The combined land base in Indian Country totals approximately 70 million acres, and for individual American Indian nations, land base size ranges from less than ten to more than 14 million acres. Of these, an unknown number of tribes operate their own fish and wildlife management programs. Although various tribes attempted to formally regulate tribal citizen or non-citizen recreational behavior as far back as perhaps the 1940s, it was in *New Mexico v. Mescalero* in 1983 that the Supreme Court confirmed the rights of tribes to manage fish and wildlife on tribal lands. *New Mexico v. Mescalero* shortly followed the 1975 Indian Self-Determination and Education Assistance Act which began the process of transferring tribal programs from federal administration to tribal administration. Natural resource programs were candidates for such transfers.

In considering how to tap into this vast and complex world of tribal management programs, I chose to adopt a case study approach for several reasons. Large-scale quantitative data may have been very difficult to obtain because mail-in survey response rates are notoriously low, and especially so in Indian Country. Moreover, in quantitative science, populations are often assumed; however, constructed populations are always better as they are more closely tied to theory (Ragin 2000). Additionally, the complex issues surrounding tribal sovereignty and the political and legal landscape in which tribes manage their resources suggested case study research would be particularly appropriate. Furthermore, aggregate-data analyzed quantitatively would be likely to miss many of the key, situation-specific factors that may play a large role in management outcomes. Indian nations are like countries in that aggregate-data comparisons are useful for revealing differences between the units, but are often of limited use for explaining those differences—the units involved are just too complex. Fortunately, generous funding from several sources enabled me to choose seven tribal cases to visit for in-depth interviews, observation and the collection of secondary materials.⁶

Each of the seven cases was chosen on dimensions of similarity as well as diversity. Comparative methodology involves careful selection of cases that have the same outcome as interest lies in variation in the conditions and combinations of conditions. This kind of purposive sampling is justified both because it is easier than finding a perfect representative sample and because it requires careful consideration of

⁶ Generous financial support was provided by the Udall Center for Studies in Public Policy at the University of Arizona, the Social and Behavioral Sciences Research Institute at the University of Arizona, the Rural Sociological Society and the National Science Foundation.

the theoretically relevant causal conditions (see George and Bennett 2005). Furthermore, determining a set of case studies through randomized sampling would be unproductive because there is no assurance that the Indian nations chosen this way would allow me to do the research (see Cornell 2009). Consequently, I had to sample realistically—that is, I sampled purposively among cases where I would likely be allowed to do the research.

The two tribes in Arizona, the White Mountain Apache Tribe and the San Carlos Apache Tribe, share much in common as their reservations were both established by executive orders and border each other (and consequently share some similar geography and climate), they interact with the same state officials, and their cultures and traditions are historically related. Each of these Apache tribes is known for its world-class trophy hunting, and both make significant revenue from their public recreational programs. However, while the White Mountain Apache Tribe is known for stability in its government and the effectiveness of its programs, San Carlos has been ridden with political instability and severe social and economic challenges.

In Montana, the Crow Tribe and the Confederated Salish and Kootenai Tribes (CSKT) vary from each other perhaps a bit more. As for the Arizona tribes, both the Crow and CSKT must interact with the same state officials within the same state legal field, and they have reserved their reservations through treaties with the U.S. government. Otherwise, these two tribes have dramatically different geographies and natural resources within their reservation boundaries. Their traditional cultures are not particularly related. Neither makes significant revenue from recreational programs, but the CSKT have capitalized on mitigation funding related to the built waterways affecting reservation

ecosystems. The Crow have lost significant legal battles to regulate activity within their boundaries. Furthermore, the CSKT are known for their governmental stability and effectiveness, while Crow have faced many challenges related to a governmental system that did not match Crow understandings of what it means to govern. The Crow have recently reformed their constitution to address some of the cultural mismatch, and are perhaps at the beginning of a success story.

Although the Yakama Nation is the only tribe in this study from the state of Washington, the Yakama and CSKT share more in common than do the two Montana tribes. In 1855 both the Yakama and CSKT negotiated treaties with a commission led by Territory of Washington Governor Isaac Stevens, resulting in similar language preserving their rights—particularly to off-reservation activities and consequently the management potential that comes with those rights. Both tribes' reservations encompass part of the Columbia River system, enabling them to get funding for mitigation from hydroelectric dams affecting their waterways and habitat.

In Minnesota, the Red Lake Band of Chippewa and the Fond du Lac Band of Lake Superior Chippewa also have historically related cultures. However, the Fond du Lac Band has remained one of the six members of the Minnesota Chippewa Tribes, while the Red Lake Band withdrew from the Minnesota Chippewa Tribes General Council in 1918. Both tribes share similar geography and climate, but Red Lake's management is all within-reservation (and a small ceded portion) while Fond du Lac's is nearly entirely off-reservation, as each signed different treaties with the federal government. Red Lake is one of two tribes in the U.S. that did not open its reservation up to allotment and

consequently owns all land within its exterior reservation boundaries. Fond du Lac was opened up to allotment and today the tribe controls approximately 25% of the land within its reservation. Additionally, although Minnesota is one of several states affected by PL-280 granting state jurisdiction on tribal lands, only Fond du Lac is affected by this as Red Lake was made an exception.

What all of these tribes do have in common is that each manages its own fish and wildlife program and each has experienced some form of notable success with that management. However, by selecting these varying cases, I was able to explore a range of possible approaches to and effects from the diverse programs.

Initial contact with each tribe was made in via telephone or email to a tribal leader or tribal resource manager. Some of these initial contacts were made through contacts I already had in Indian Country. For others, through cold calls, I utilized the three alternate strategies of accounts, knowledge and courtesy suggested by Lofland and Lofland (1995) for gaining access to research sites. Every initial contact person was very welcoming and interested in the project. In these first conversations appropriate means for obtaining tribal approval for the research were discussed. This either involved meeting with tribal leaders or tribal councils before making research trips, or involved sending written information about the project ahead of time. In one case, obtaining tribal approval required two site visits and multiple communications spanning an 18-month period. After obtaining written tribal approval, we then scheduled research trips, some of these being highly structured ahead of time, but most involving on-the-ground planning when I

was on site. All told, I took eleven research trips to seven sites, each lasting several days. When possible, I stayed in tribally-owned hotels.

Once at the tribal programs, I met with a wide variety of individuals involved with the tribal fish and wildlife programs. This included tribal council members, fish and wildlife program directors and other managers, natural resource directors (if this encompassed a fish and wildlife program), various fish and wildlife biologists, technicians, conservation officers, sales and public relations personnel, information and education personnel, dispatchers, grant writers, hunters and fishermen, fish and wildlife advisory board or committee members (some of which represented state or federal interests), tribal lawyers, former program directors or managers, and administrative staff. For the Yakama Nation case, I also met with two staff members and a conservation officer with the Columbia River Inter-Tribal Fish and Wildlife Commission. Additionally, for three of the tribal cases, I met with state department of natural resource staff to discuss matters of co-management with the tribes. This totaled 47 formal interviewees. Four interviewees were women, and all were adults.

Interviews

All interviews were conducted in a location and at a time of the interviewees' choosing. Typically this was in an office or conference room, but occasionally interviews took place in restaurants, vehicles or outdoors. Most often participants were interviewed individually, but occasionally they preferred to be interviewed in groups. Each interview lasted between approximately 30 minutes and several hours (sometimes over a series of days) and consisted of both closed-ended and open-ended questions. (See

Appendix A for the basic interview schedule.) All interviews were conducted in light of recommendations by Starks (2003) regarding appropriate interview techniques for working with tribal populations. Some interviews precisely followed the interview schedule. For others, once I asked the first question, the interviewees spoke uninterrupted for the rest of the interview. Some interviewees answered their questions through story-telling.

Most interviewees' comments are cited in this dissertation by their work position, and not their names. This was a condition made for obtaining human subjects' approval with the University of Arizona Internal Review Board.

All interviews, with one exception, were audio-recorded. I also took notes of main points during the interviews, a common good practice for this kind of research (Emerson et al 1995; Lofland and Lofland 1995). (Additionally one interviewee could not make a face-to-face interview and so responded to the interview questions in written form.) In fact, all interviewees but the one who did not want to be audio-recorded seemed very comfortable in interviewing and interested in sharing their knowledge and experiences. Some interviewees provided confidential information and this has been respected in the handling of the data. No information that was offered as confidential or that was later identified as confidential has been included in the analyses or write-up. All audio-recorded interviews were transcribed (totaling over 650 pages of transcription), with the resulting transcriptions kept on a password protected computer. (For a discussion of the advantages of complete transcription, see Bird 2005; Lapadat and Lindsay 1999).

For all tribal cases, follow-up conversations via telephone and email have clarified or expanded information about the programs. In some cases, I conducted a second research trip. For others, I ran into or met up with former interviewees at regional and national tribal fish and wildlife conferences and was able to further discuss any unclear or pending issues.

Observation

Although systematic observation was not part of the research design, certainly as a researcher travels to and spends time at research locations, she will make observations about the context and function of the phenomena of interest. Additionally, the gracious tribal employees I met on my research trips volunteered to show me around. I took tours of rangeland, visited the bison herds, scouted for wild horses, toured fish hatcheries, rode an aqua-machine into the marshes, met up with fishermen at fish camps, and so on.

Because I stayed as close as possible to the tribal fish and wildlife offices, and because many of my visits included open time, I was often also able to informally chat with other local people such as hotel workers, store clerks, administrative assistants, restaurant customers, etc. These informal conversations sometimes highlighted particular issues I later could address with my interviewees.

In addition to my research trips to the sites of tribal programs, I also attended two national annual meetings (in Reno, NV and Yakima, WA) and one regional annual meeting (in Billings, MT) of the Native American Fish and Wildlife Society (NAFWS). NAFWS is a professional organization formally established in 1983 to “develop a national communications network for the exchange of information and management

techniques related to self-determined tribal fish and wildlife management” (NAFWS 2008). Today 224 tribes are members of NAFWS in addition to numerous individuals. (In order for a tribe to become an NAFWS member, a copy of a resolution by the tribal council needs to be submitted.) At the Reno conference I administered a survey (discussed below). At both national conferences I volunteered with NAFWS to help run the conference. These were invaluable experiences. Through the volunteer training, I was able to meet and work alongside other volunteers (all tribal citizens related in some way to a tribal fish or wildlife program). Perhaps even more importantly, my main volunteer responsibility at the Reno conference was working at the registration table with other volunteers and the NAFWS staff. Although this responsibility was more time-consuming than I had expected and therefore kept me from attending some of the conference sessions, it was the perfect opportunity to get to know and speak with others. Particularly, my role at the registration table enabled me to meet a significant portion of the conference attendees. (I estimate I met half of the approximately 200 attendees. For many of those I was not personally registering, I was able to see them approach the desk and give their names, which allowed me to put faces with names of people in management I had previously or later heard about.) It was at the registration desk that I met a program director I had been trying to get hold of via telephone for months. After meeting in person at the conference we were later able to have the phone conversation to set up my site visit and include his program as one of my cases.

These introductions and connections enriched my participant experience at the conferences as I was able to informally talk to many individuals through the conference

sessions, social gatherings, field trips and feasts.⁷ These connections were also valuable outside of the conference setting. For example, later when visiting the White Mountain Apache Tribe I ran into someone I had met passing through the Reno conference casino, and this earlier brief connection (which was chitchat, having nothing to do with natural resource management) made it easy for me to approach him at the WMAT offices. (He was not scheduled as an interviewee). In addition to tribal employees and some tribal leaders in attendance, the NAFWS national conference also attracts key individuals from federal agencies like the BIA, U.S. Fish and Wildlife Service (USFWS), the U.S. Department of Agriculture (USDA), the U.S. Geological Survey, Bonneville Power Administration (of the Department of Energy) and the National Resources Conservation Service (of the USDA). At the conferences I was able to meet in person several federal employees who had communicated with me about my research via phone or email.⁸ After the conferences, I was even more comfortable contacting them for information. Therefore, while I carried out systematic research with seven tribal nations, this dissertation also draws upon discussions, stories and personal communications with numerous other nations and individuals involved with tribal fish and wildlife.

Because so many people involved in tribal management attend the national NAFWS conference, I was also able to reconnect with interviewees and other employees

⁷ Each NAFWS conference is hosted by a particular tribe that offers field trips related to their management work as well as a traditional feast with local tribal performances. At the Reno conference the field trip was to the Pyramid Lake Paiute fisheries and cultural center. At the Yakima conference multiple field trips were offered to various Yakima tribal habitat restoration areas as well as to the fish hatcheries. The Crow Tribe hosted the regional Billings meeting, and although there was no field trip, the Tribe put on a wonderful feast in a local Billings park.

⁸ One federal agent I met at the conference asked me about my research and my relationships with tribes, and then he requested that I apply for a job with his agency.

from the tribes that I had already visited for my research. This renewed our relationship as well as, I believe, reinforced for them an understanding that I am someone who is interested in and supportive of tribal natural resources management. Attending a second annual conference further reinforced the relationships and connections I had made at the first and, during the year in between, in my visits to various tribal programs. In many ways, it felt like I was reconnecting with friends. In fact, I have since become friends with several participants from the conferences and catch up with them and the progress of their work on a fairly regular basis.

Archival Data Collection

Each set of tribal staff shared with me various documents about their programs. These included fish and wildlife codes, public relations brochures, pamphlets outlining tribal citizen and non-citizen hunting and fishing regulations, tribal council resolutions, organizational charts, biological reports, etc. Additionally, I obtained secondary information about the programs from internet websites, government offices (particularly the BIA fish and wildlife specialist's office, BIA realty, the U.S. Fish and Wildlife Tribal Liaison's office, regional or local offices of each of these agencies, and the U.S. Census), intertribal organizations, and other data collected by researchers at the Native Nations Institute.

Surveys

Because no comprehensive picture of tribal management of fish and wildlife programs currently exists, I also wanted to do a survey to cast a wider net for information about tribal programs. This idea initially came up in an informal conversation with the

Director of the Fish and Wildlife Conservation office of the USFWS in Montana, who was a key figure in the formation of NAFWS. We discussed whether some comprehensive information about the tribal programs would be useful for NAFWS and we together decided a survey of NAFWS members would be mutually beneficial. Other conversations with the USFWS national tribal liaison (also a longtime and influential member of NAFWS) confirmed this as he felt that at this point, there is no common Native voice regarding natural resource issues in Indian Country, and he saw the survey as an opportunity to share and compile challenges and success techniques, after which discussions could begin and a unified Native voice develop.

I created a survey instrument shaped in part by the data generated from the first of my case studies and sent a draft of the instrument to the USFWS liaison and to the USFWS Director in Montana who in turn sent it to several board members of NAFWS who are also tribal fish and wildlife program managers. With their feedback, I created a final draft of the survey and headed to Reno for its administration. (See a copy of this instrument in Appendix B.)

As mentioned above, I volunteered at the NAFWS Reno conference registration table. In doing so, I was able to administer my survey by personally handing and introducing the survey to each person I registered. Other volunteers at the registration table who were simultaneously doing registrations also handed out and explained the survey. Participants in the conference knew that I could be found at the registration table and many approached me there to discuss the survey or to hand a completed survey to me

directly. There were also two collection boxes placed at the registration table and another table near an exit door to gather completed surveys.

Being present at the conference, I was able to politely remind people to turn in their surveys. One participant told me he did not want to write the survey, but that he would be happy to go over it verbally. Therefore, I was able to discuss the survey with him, and fill in his answers as we spoke of his tribal enforcement program.

Through the conference experience I was able to learn about many tribal programs. In some cases, when I later found an inconsistency in the survey, I could often rely on the information I gathered simply through chatting with people to clarify the confusion.

Of the approximately 200 participants at the Reno NAFWS conference, 76 completed and turned in surveys. These 76 individuals represented 38 different tribes. A few of the surveys were not used for these analyses because they were incomplete or they were from Alaskan tribes where the tribal management context is sufficiently different that fish and wildlife programs are not really comparable to such programs in the lower 48 states. Consequently, remaining surveys represented 36 tribal programs.

A few challenges arose in interpreting responses in the survey data. Although the survey had been piloted with professionals in tribal management, the challenges came with multiple respondents for one program. Because the unit of analysis (or case) in this study is the tribal program and not individual staff, when multiple staff from the same program completed surveys, these data were used to cross-check each other. This was useful in that it highlighted potentially incorrect responses that would not have been

identified had there not been multiple respondents for a single program. When an inconsistency appeared in response to objective questions (for example, when asked when the program became entirely run by the tribe, one participant responded “1984” and another responded “1988”), I confirmed the correct answer with a secondary source such as an official tribal website, or I contacted authorities in those programs for resolution of the inconsistency. (Survey respondents listed the tribal programs they were associated with and their work positions, but individual identity remained anonymous.

Consequently, I could not directly contact the respondents themselves for any clarification.) When an inconsistency came up in response to more subjective questions (such as, “How would you rate the Tribe’s support for the fish and game department? Please circle the rate on a scale of 1 to 5, with 5 being the highest rate of support.”) the average was taken. There were only a few of these subjective questions, and an average is appropriate in incorporating all true responses.

Several questions on the survey inquired about money, including an estimate of annual funding and annual revenue. Although these questions were helpful in getting a sense of the scale of the needs and revenues of these programs, these financial questions displayed the greatest inconsistencies between survey respondents. (The most dramatic range included seven respondents from one program with responses to a question about annual funding requirements ranging from \$100,000 to \$1.4 million.) Consequently, no specific financial information is used in the analyses. However, it did reveal a fairly widespread lack of knowledge or varying interpretations of the financial aspects of the programs by some respondents.

Other questions attracted surprising responses that might suggest a more clan-like logic operating within some of these programs. For example, the “objective” question referred to above about when the program became entirely run by the tribe also attracted responses such as “forever” and “time immemorial.” A discussion of these types of responses can be found in Chapter Five. Such unexpected responses, while not revealing the information originally sought, were in themselves interesting and useful to my understanding of these programs.

This survey was the first of its kind. The NAFWS is *the* national organization uniting tribes and program employees on matters of fish and game, and this was the first time its members were systematically surveyed. Neither the BIA nor the USFWS has any better or more comprehensive information about which tribes are managing their programs and how they are doing so. While some of the challenges in the data led to particular questions not being included in the analyses, others offered information about the programs that had not been anticipated. I supplemented survey data with secondary data from a variety of governmental and other secondary sources.

Data Analysis

Qualitative Data and Coding

Transcripts and notes from the case studies make up the qualitative data in this study. These data were coded using Nvivo7 software, a commonly used program for advanced qualitative coding and analysis (see Bazeley 2007). Data were coded based on their theoretical relevance from the CPR, nation-building and organizational literatures. With Nvivo, passages can be coded into multiple codes at once. These “free nodes” can

later be organized into “tree nodes” in order to establish theoretical relationships between them. Appendix C illustrates the codes I created.

Particularly, I used qualitative analysis to better understand the contexts and conditions through which the case study tribes manage their resources and with what results. I also used qualitative analysis to examine the organizational forms and logics among the tribal management programs. The results of these analyses are described in detail in Chapters Three and Six respectively.

Fuzzy-Set Qualitative Data and Analysis

Additionally, both the case study (interview and observational) data and the survey data were analyzed using fuzzy-set qualitative comparative analysis (fsQCA). While the various strengths and weaknesses of traditional analytic methods are well-known, qualitative comparative analysis (QCA), developed by sociologist Charles Ragin, has emerged as an alternative way of understanding causality (see Ragin 1987, 2000). Most research questions are couched in set-theoretic terms, as they begin as verbal statements that contain set-theoretic relations. Therefore, these set relations are the building blocks of most social science theory (Ragin 2006). However, set-theoretic relationships are asymmetrical and consequently best understood beyond correlations, the foundation of much social scientific research techniques (such as multiple regression analysis). In most quantitative methodology, causation is assumed to be linear and additive, and necessity and sufficiency cannot be addressed. In contrast, QCA assumes that causation is multiple and combinatorial whereby particular causal factors may be necessary but not sufficient, sufficient but not necessary, or both. This allows for

multiple pathways (or “recipes”) to lead to the same outcomes, better reflecting causality in the real world.

Different methodologies are appropriate in addressing different questions (Ragin 1987), and QCA may be particularly helpful in analyzing questions of common-pool resource management. Agrawal argues for studying *interactions* between classes of variables, and not just the main effects on which most CPR research has focused, stating “The multiplicity of causal variables, and the lack of attention to how the observed effects of these variables depend on the state of the context, has created significant gaps in explanations of how common property institutions work” (Agrawal 2002:41). Systematic tests of findings in common-pool resource research have been rare, and “Such a focus on institutions...comes at a cost. The cost is the lack of careful analysis of the contextual factors that frame all institutions and that affect the extent to which some institutions are more likely to be effective than others... Also uncommon are studies that connect the different variables they identify in causal chains or propose plausible causal mechanisms” (45-46). Agrawal also states that “Instead of focusing on lists of factors that apply to all commons institutions, it is likely more fruitful to focus on configurations of conditions that contribute to sustainability” (2002: 53) also suggesting QCA would be an appropriate method.

With fuzzy-set QCA, cases (which can range in number from just a few to several hundred) have varying degrees of membership in causal conditions that are hypothesized to have an effect on a particular outcome. For example, a particular tribal program may be mostly a member of the condition ‘financially poor’—allowing the condition to be

measured as degree of membership in a clearly defined set. *Fuzzy-set* QCA allows conditions to vary between and inclusive of 1 and 0, so that a case that is mostly in a particular set may have a fuzzy-set score of .8, while a condition that is mostly out may have a score of .2. Both binary and fuzzy scores were utilized in coding the data for this dissertation.⁹

Using Boolean multiplication (logical AND) and addition (logical OR), fsQCA analysis seeks out combinations of conditions to represent pathways to a particular outcome (Ragin 2000). I performed the fsQCA with the assistance of the fsQCA software (version 2.2), and examined the pathways to four different outcomes (described below). In addition to simplifying the causal combinations of pathways, fsQCA also provides indicators of the consistency and coverage of individual and sets of pathways in relation to the outcome. With fsQCA, consistency indicates the degree to which a subset relationship between a condition or set of conditions and an outcome has been modeled (Ragin 2006). A condition or set of conditions may be a subset of an outcome if scores for the condition(s) are equal to or lower than the scores for the outcome. In an X-Y plot, the upper-left corner of the plot is populated. In conventional quantitative analysis, cases found in this corner represent error. In fsQCA, these positions represent cases which have low scores in the condition and high scores on the outcome, suggesting the very real-world prospect that there may be other conditions which affect the likelihood of the outcome. This does not mean that the condition in question is not important—indeed,

⁹ For the surveys, when more than one survey respondent gave information about a particular case for a dichotomous response, these were averaged thereby often making the outcome fuzzy.

although in conventional quantitative analysis this condition would be dropped, with fsQCA we can understand this condition to be sufficient but not necessary for the outcome. A set relation in which the outcome may be a subset of a condition can be estimated by calculating the consistency of necessity. That is, when membership scores of an outcome are lower than the scores for a condition or set of conditions, the condition(s) may be necessary for the outcome. In an X-Y plot, these points would fall below the diagonal. Again, in conventional quantitative analyses, points closest to the bottom right corner would be considered error, but with fsQCA we can see that although a case may have a high membership score in a particular condition and a low score in the outcome it would be a mistake to discount the condition. Indeed the condition appears necessary for the outcome, although scores in the bottom right corner indicate the condition is not sufficient and other conditions may also need to be present to produce the outcome. If all points in the X-Y plot fall either above the diagonal (for sufficiency) or below the diagonal (for necessity), the consistency measure would be 100%. However, perfect consistency in social science is fairly rare as exceptions to subset relations can often be found, but advanced fuzzy-set consistency measures can account for real-world near misses and provide measures that make theoretical and substantive sense, despite imperfect (or inconsistent) scores (Ragin 2006).

Coverage on the other hand evaluates the empirical relevance of subsets, that is, the degree to which a condition or set of conditions accounts for the outcome (Ragin 2006). Indeed coverage should only be calculated if consistency measures indicate there is a set relationship. When calculating coverage, only those scores that satisfy

consistency are included. If there are many pathways to a particular outcome, coverage for any one pathway (combinations of conditions) may be low, even if consistency is high suggesting that although there is a strong set-relation regarding sufficiency between that pathway and the outcome, the pathway does not explain much of the outcome and therefore is not of much interest (Ragin 2006). Similarly, coverage allows us to separate out trivial from non-trivial necessary conditions (Goertz 2003). If a condition's necessity is highly consistent, but its coverage is low, that condition may be trivial even if necessary. FsQCA also allows us to partition coverage to look at both the raw and unique coverage of sufficient conditions or combinations of conditions. This is important because any particular case may take more than one path to an outcome. Because coverage assessments allow us to determine the empirical relevance of sufficient subsets, we can further evaluate the importance of logically equivalent pathways (Ragin 2006).

Outcomes

Specifying measurable outcomes is a challenge in CPR research. Rarely are studies able to rigorously measure their dependent variables, particularly when they are conceptualized as "successful management" or "sustainability" (Agrawal 2002). This lack of specificity is related in part to a much larger theoretical challenge in defining sustainability. However, Agrawal uses a general "sustainability of the commons" outcome indicating "the durability of institutions that frame the governance of common-pool resources," and many other studies among the CPR literature define successful institutions as "those that last over time, constrain users to safeguard the resource, and produce fair outcomes" (Agrawal 2002:44).

In the initial stages of this research, I had considered operationalizing institutional sustainability in part through a measure of the time passed since the tribal programs first became run entirely by the tribes. Given some of the complexities related to identifying an exact “start date” mentioned above and that formally, most programs have only become truly tribal programs since the early 1980s, I do not include a measure of program durability in these analyses.

Nevertheless, other indicators have been useful. The first fsQCA outcome is “tribal management” itself. Looking at recipes for tribal management among the case study cases (who all manage their own programs) and at pathways to tribal management among the survey cases (who vary along this outcome), allows us to better understand what enables tribes to exercise self-determination in the fish and wildlife management arena and under what conditions. For the seven case study cases, this outcome was coded as 1, a fuzzy-set indicator of “fully in.” For the 36 survey cases, each case’s score was either 0 (because their fish and wildlife were managed by the state), .6 if they shared jurisdiction with the state (whereby the state managed tribal wildlife for the non-tribal public), or 1.

Additionally, in response to interest in how institutional forms and other conditions affect tribal management, two other outcomes are incorporated into the analyses.¹⁰ Tribal leaders and staff talk about tribal fish and wildlife resources being under tribal management jurisdiction. In addition to this, they want to be able to manage their own resources for the conservation purposes and sometimes for the revenue that

¹⁰ This research question is also addressed through the qualitative analysis.

they could potentially earn through public hunting and fishing programs. Regarding conservation, an overall measure of the “health of the fish and wildlife populations” is used to get at the effects of management. Although this measure is generalized, it is more appropriate as a broad measure. While it is quite technical to designate the specific health of any particular species, it becomes extremely complex to incorporate an entire ecosystem’s worth of species. Furthermore, not only does the researcher not necessarily have access to these data, the tribal managers themselves in some cases do not have access—or these data do not even exist. Nevertheless, a very clear sense of healthy or unhealthy fish and wildlife populations overall can easily be determined by speaking to anyone who works with, hunts or fishes these species. In the course of multiple conversations on this topic of population health, I found a high degree of consistency in responses within single cases. Survey respondents estimated the overall health on a Likert scale, the responses to which I converted to fuzzy scores. For the case study cases, this matter was handled purely qualitatively, as there was little variation in the outcome (all but Crow were perfectly “in”) but not a perfect set of positive outcomes, which would have enabled me to look for “recipes” to the outcome. Additionally, “significant revenue” is a fuzzy outcome for the case study cases and “revenue” is a binary outcome for the survey cases.¹¹

Conditions

While a long list of conditions from the literature are known to be influential in determining the sustainability of local control of common-pool resources, the

¹¹ While I hoped to make this outcome fuzzy for the survey cases, survey participants’ responses to questions of revenue varied greatly, as mentioned above.

relationships between these conditions is still not well understood. In an attempt to better understand how context and multiple causality affect the outcomes of tribal management, healthy fish and wildlife populations and revenue, I used the conditions listed in Table 2.1 in the fsQCA. The names of the conditions are in capitalized letters and their description follows.

Table 2.1 FsQCA Conditions

Case Study Conditions
DEDICATION: The tribal fish and wildlife programs have highly dedicated employees
LONG: The tribal programs' employees have a high degree of longevity
PROACTIVE: The tribal government or tribal department is highly proactive in working towards tribal management
CLAN: The tribal program has a high degree of clan-logic or clan organizational characteristics
BUREAU: The tribal program has a high degree of bureaucracy or bureaucratic organizational characteristics
CITIZENREG: Tribal citizen hunting and fishing activity is highly regulated by the tribe
LARGELAND: The tribe has a large land base
LANDBASE: The tribe controls a large proportion of the land within reservation boundaries
STEADYFUND: Funding to the tribal program is more or less constant
TREATYRIGHT: The tribe has reserved rights to hunt and fish through a treaty
GOODRELAT: The tribal fish and wildlife program has a productive relationship with the state
STRONGMATCH: There is a strong match between the traditional or cultural practices of hunting and fishing and the institutionalized norms regarding these activities
REVCONTROL: Revenue earned by the tribal programs remains in the tribal programs
NONCITIZENHF:

Non-tribal citizens may hunt or fish under tribal regulations
JURISDOVERNON: The tribe has regulatory and adjudicatory jurisdiction over non-tribal citizens within the exterior boundaries of the reservation
Survey Conditions
LARGELAND: The tribe has a large land base
LANDBASE: The tribe controls a large proportion of the land within reservation boundaries
TREATY: The tribe has reserved rights to hunt and fish through a treaty
ADEQFUND: The tribal program has adequate funding to meet program goals
CITIZENREG: Tribal citizen hunting and fishing activity is highly regulated by the tribe
COURTABILITY: The tribal court is highly effective at handling fish and wildlife matters
NONCITIZENHF: Non-tribal citizens may hunt or fish under tribal regulations
JURISOVERNON: The tribe has regulatory and adjudicatory jurisdiction over non-tribal citizens within the exterior boundaries of the reservation
TRIBALSUPPORT: The tribe is very supportive of the tribal fish and wildlife programs
BIOS: The tribal programs have biologists on staff

Chapter Four presents the fsQCA results and Chapter Five discusses these results in light of the literature and their relevance to natural resource managers and tribal leaders.

CHAPTER THREE:

CASE STUDIES OF SEVEN TRIBAL MANAGEMENT DEPARTMENTS

1. The Crow Tribe

Management for the Crow Tribe involves both fish and wildlife resources on the Crow reservation. Despite having ceded a significant amount of land to the United States, the Crow Tribe does not manage or exercise hunting or fishing rights off-reservation.

Background to Crow Fish and Wildlife Management

The Apasalooke, or the Crow, live in Southeast Montana, part of their traditional homeland since migrating west from the Mississippi headwaters in the 1600s. From the time of initial contact with Europeans in 1740, the Crow Nation has worked towards friendly relations with non-Indians (Tiller 2005). They signed an early treaty with the U.S. government in 1825, followed by treaties in 1851 and 1880, limiting these nomadic people, whose lives centered on following the buffalo, to their current reservation of just under 2.3 million acres.

Although smaller than their traditional homeland, this large land base is full of natural resource opportunity. Speaking to a fur trader in the 1830s, the Crow Chief Eelapuash said, “The Crow Country is a good country. The Great Spirit has put it exactly in the right place; while you are in it you fare well; whenever you go out of it, whichever way you travel, you will fare worse” (Little Big Horn College Library 2008).¹² The reservation is mostly prairie, containing some of the best grasslands in the United States. However, it encompasses all or part of three mountain ranges sacred to the people, the

¹² In some older texts Chief Eelapuash is identified as Arapooish.

Wolf Mountains in the east and the Big Horn and Pryor Mountains in the South. It also contains three major waterways: the Big Horn and the Little Big Horn Rivers and the Pryor Creek drainage. Further, Crow land is also rich in oil, gas and coal reserves, leases from which provide significant revenue for the Tribe today.

In 1887 the reservation was opened under the General Allotment Act, allowing most land bordering the rivers to be sold to individual fee owners and resulting in a checkerboard land base in which the Tribe owns just over 20% of land within the exterior boundaries (BIA Realty 2000). While there are almost 11,000 enrolled citizens of the Crow Tribe, the reservation is home to about 6,800 American Indians (BIA 2003, Census 2000). The Tribe has one of the highest percentages of citizens whose first language is their Native language and all official business at the reservation is conducted in the Crow language. The reservation population is also relatively educated with over 77% obtaining a high school degree (Census 2000).¹³ This, however, does not translate into a thriving economy, and 64% of eligible adults are unemployed (BIA 2003). Historically the Crow people were quite prosperous, but the per capita income in 1999 was \$9,440 (Tiller 2005, Census 2000).

Traditional Crow societal organization revolves around a clan system which continues to be an important influence in Crow society today but which in the past has not been reflected in the formal governmental system. The Tribe did not reorganize in 1934 under the IRA. Instead, based on significant non-Native legal advice, it adopted a

¹³ According to a 2007 report from the Editorial Projects in Education Research Center, in 2004, the high school graduation rate of American Indian students was 49.3%. For white students it was 76.3% and for all American students it was 69.9% (EPE 2007). 80.4% of all American adults have a high school degree (Census 2000). In Montana specifically, the average for Indian students is 66.3% and for white students 88.6% in 2007 (Montana Office of Public Instruction 2006).

constitution in 1948 that provided for a General Council in which every adult citizen of the Crow Tribe served as part of the decision-making body, and the Tribal Court operated under Tribal Council oversight (Begay et al 2007). This unwieldy government and lack of separation of powers presented numerous challenges to Crow governance and capacity building. Because any court decisions could be affected by political interests, tribal citizens, outside litigants, and potential investors in Crow affairs did not feel confident that fair dispute resolution mechanisms were set up to protect them.

Challenges to Crow Sovereignty

These governance challenges have not helped the Tribe maintain and strengthen its sovereignty in recent decades. In 1981 the Tribe lost a major legal battle for sovereignty in *Montana v. United States* (1981) in a Supreme Court decision regarding tribal jurisdiction over non-citizens. In *Montana* the United States, as the trustee for the Crow Nation, sought to settle disputes with the State of Montana over title to the bed and banks of the Big Horn River which flows through the Crow Reservation. In the 1970s the Crow Tribe had passed a resolution prohibiting hunting and fishing by non-citizens within the reservation boundaries. The State of Montana disputed this resolution and continued to enforce state regulation of non-citizens on fee simple land within the reservation. After the Montana District Court ruled in favor of the state, the 9th Circuit Court of Appeals reversed it. Finally, the U.S. Supreme Court ruled that the bed of the Big Horn belonged to the State of Montana and that the Crow Tribe had no jurisdiction on fee simple land owned by non-Tribal citizens within the Crow Reservation boundaries. This decision includes what are commonly known as the “Montana

exception” rules. One exception allows the Tribe to regulate non-citizens if they “enter consensual relationships with the tribe or its members, through commercial dealing, contracts, leases or other arrangements.” Although the ruling said the Tribe did not have jurisdiction to regulate non-Indian hunters and fisherman who owned or accessed non-Indian fee land, the other exception enables the Tribe to regulate activity if that conduct would impact the health, safety, property or welfare of the Tribe.

The treaty language reserving hunting and fishing rights appears clear. Article 5 in the first treaty of Fort Laramie in 1851 states,

It is, however, understood that, in making this recognition and acknowledgement, the aforesaid Indian nations do not hereby abandon or prejudice any rights or claims they may have to other lands; and further, that they do not surrender the privilege of hunting, fishing, or passing over any of the tracts of country heretofore described. (Article 5 Treaty of Fort Laramie 1851)

Yet this treaty has no bearing on ownership of the riverbed. In contrast, Article 2 of the 1868 second treaty of Fort Laramie does establish land ownership in stating that specific land is "set apart for the absolute and undisturbed use and occupation of the Indians herein named." Article 4 also reaffirms hunting rights:

The Indians herein named agree...they shall have the right to hunt on the unoccupied lands of the United States so long as game may be found thereon, and as long as peace subsists among the whites and Indians on the borders of the hunting districts. (Article 4 Treaty of Fort Laramie 1868)

Nevertheless, in *Montana v. United States*, the Court stated that “Whatever property rights the language of the 1868 treaty created, however, its language is not strong enough to overcome the presumption against the sovereign's conveyance of the riverbed,” arguing the bed passed into ownership of the State of Montana when it joined the Union in 1889 (*Montana v. U.S.* 1981). (Generally, riverbeds were granted to states upon their

joining.) While *Montana v. United States* ruled regarding tribal jurisdiction over non-Indians on fee simple land within the trust lands of the Tribe, *Montana* is regarded as a seminal case that has been widely used and expanded to include any kind of jurisdiction activities over non-Indians, whether on fee land or trust land.

Another blow to Crow sovereignty came in the 2000 decision in *Big Horn v. Adams*. In 1993 the Tribe created a tax code in which a tax would be imposed on any utility property on Tribal or trust land at full fair market value. Big Horn Electric Cooperative, which provides power to Montana and Wyoming customers (half of which were Crow tribal citizens), transferred this tax to its customers, itemized in their monthly bills as “Crow Utility Tax.” The Tribe then sued Big Electric in Tribal court and won. An appeal by Big Horn Electric in the Crow Court of Appeals was turned down. Big Horn Electric filed a complaint against individual Tribal officials in the federal district court seeking injunctive and declaratory relief—and a refund—arguing the Tribe had exceeded its jurisdiction. Finding that neither of the Montana exception rules applied, the court granted a permanent injunction preventing any future assessment of the utility tax, and a refund. This decision also overturned the 1991 ruling in *Burlington Northern Railroad Company v. Crow Tribal Council* (1991) which allowed the Crow Tribe and others to tax the Burlington Northern Railroad and other similar utilities, thereby establishing this regulatory jurisdiction outside of the Tribe’s authority (*Big Horn v. Adams* 2000).

After these legal blows and decades of political challenges, the Crow Tribe focused on internal change and adopted a new constitution in 2001 in an effort to

stabilize the government, provide for a separation of powers and offer due process and equal rights to its citizens. Although the new constitution also changes the term limits for executive and legislative members from two years to four years, one of the biggest challenges to governance, and in particular to fish and wildlife management, is a turnover in tribal employees with every change in administration. That is, once a chairman is elected to preside over the executive branch, he/she appoints all management-position employees to work for the Tribe. The head of the natural resources department (NRD) is appointed by the chairman, and this new head then chooses his/her own staff. Consequently, with every change in chairman, nearly the entire base of tribal employees operating tribal affairs is made anew. The effect on governance is significant. Among other things, institutional memory is kept at a minimum. Experiential knowledge is all but lost, and written documents are the only hope for a transfer of information between generations of staff. There has been no turnover in the tribal chairman position since the constitutional reform took place in 2001; consequently the effects of the reform on departmental turnover have yet to be tested.¹⁴

With these kinds of overhauls within the departments in the past, little concrete information exists regarding the evolution of the fish and wildlife programs. What is known is that the predecessors of current conservation officers were people who lived in the mountains and watched over Crow tribal lands and livestock. Accelerating cattle rustling by non-Indians in the 1920s caused the Crow Chief to formally designate a few of these tribal citizens as “Crow tribal cattle inspectors” to monitor the cattle, and soon

¹⁴ Chairman Venne passed away in late February 2009. A new chairman will be elected shortly.

the State of Montana and the Crow Tribe deputized these rangers as officers.¹⁵ Around the same time, the Tribe obtained its first group of about 24 bison; consequently a buffalo rangers program began, and all rangers (cattle and buffalo) were adopted into a new “fish and game” program: “They hired more people not only to watch the bison and cattle, they hired other people to watch the game being poached and that kind of grew up out of the old people who used to stay in the mountains through the year.”

Crow Fish and Wildlife Management Today

My introduction to the Crow Natural Resources Department (NRD) was through a phone call to its director. He was quiet on the phone, throwing out “hmm” every so often, giving me little indication if he was interested in being involved with the project. When I asked if I could come meet him, he said, “Yes.” When I asked where to find the NRD building, he said, “This is a project on fish and game, isn’t it? Your first task is to track down the office.” I was soon to find this informal, humorous approach to interaction typical of NRD operations for the Crow.

The Crow NRD is housed in two small, crowded rooms within the tribal administrative building at Crow Agency, Montana. The physical department shows wear: the carpet is torn or absent in some places, windows are cracked, and desks are old, though most have relatively new computers on them. One can walk straight into these offices; there are several administrative assistants but they are squeezed into corners, hardly gatekeepers at the door. My first morning at Crow was not what I expected; the administrative building was virtually empty and the person I was to meet was absent.

¹⁵ Before the adoption of their first constitution, in the 1920s the tribal leader was not yet a chairman, but a chief.

The friendly dispatcher, who was working alone because her supervisor did not show up to join her for work, called my interviewee, and he came in from home over an hour later. Once there, I had his complete attention, and everyone else I met while visiting the Crow could not have been friendlier or more helpful.

Given the high turnover in managerial staff, the director of the current NRD says that his program started over “from the ground up” in 2003. Each new set of employees marks an abrupt break from the past. The turnover has not resulted in a continual development of the department but instead in a series of beginnings. Consequently, a lot has changed in the last few years. The present-day natural resources department is largely centered around law enforcement. It is composed of approximately 25 employees, all tribal citizens, including the director, 14 game wardens, dispatchers, an animal control person, and administrative staff. The Tribe is hoping to hire a biologist who would be the only department staff member outside of administration, enforcement, or support staff. Just before the 2003 change in director, most of these positions were also available, but few wardens were certified and there were no dispatchers, radios or side arms; the present director said true enforcement was non-existent.

One constant for the department is the fish and game code, first adopted in the 1970s. The code is an important legal document which outlines at length the regulations on non-citizen activity; however tribal citizen activity is virtually unregulated. The only legal restrictions for citizen activity concern the prohibition of wasting and spotlighting, and tribal citizens may hunt buffalo solely for ceremonial purposes upon special

permission from the tribal chairman.¹⁶ Otherwise, citizens have neither seasons nor limits on harvest or method. Following traditional practices, it is up to individual Crow people to follow traditional practices in deciding how much and how often they can harvest. In this sense, Crow have the fewest formal regulations of any case in this study.

The tribal fish and game staff find that this is not working well. There is a lack of clear understanding of the health of the fish and wildlife populations, and there are serious suspicions these populations are not sustainable. Crow country—encompassing open prairie, mountain ranges, and significant waterways—is ideal habitat for a wide variety of species including deer, elk, bear, buffalo, antelope, coyotes, wild game birds and various fish. Yet while the game potential is enormous, the reality, at least in some cases such as with elk now seldom seen, is exceedingly modest. Consequently, many people are concerned that this approach to management has resulted in over-harvesting, with some species now all but absent from reservation lands. There are cultural changes going on in relation to hunting and fishing that appear to be reducing traditional checks on over-harvesting. Many interviewees voiced concern that members of the younger generations are not necessarily hunting for meat, but are hunting for trophy racks.¹⁷ Consequently, they may be killing more than they can eat or leaving parts of the animals' meat to waste if they are merely interested in the heads. This is in contrast to an older hunter, describing his approach. He said, "If I see one I'll knock it down, but I'll take the whole thing, and I'll probably leave the head. Or give it to someone else. I don't care

¹⁶ Wasting involves killing animals and not eating them. Spotlighting involves using vehicle headlights or other large lights to find game at night to shock them into a still position.

¹⁷ Trophy racks are large antlers harvested from elk, moose, deer or antelope. The trophy status can be conferred by antler mass, width, length and points. On the Crow reservation, deer are the most common of these trophy animals.

about the head. You can't eat the horns, so why take it?" Some other tribes also have very open formal regulations for their tribal citizens, but many of these still require them to get free tags or permits so that the department can estimate harvest levels. With the current Crow method, any harvest levels estimated would be very rough guesses.

The department staff, along with Crow hunters and fishermen, expressed desire and hope for some kind of formal tribal citizen regulation in the near future; however, the subsistence needs of the people must be carefully considered. Land and wildlife are extremely important to Crow people. Most Crow feel that hunting and fishing are central aspects of their lives. Many people hunt or fish every chance they get, and for some individuals, this means weekly. For the Crow Tribe, arguably more than any other in this study, hunting and fishing are necessary subsistence activities. Unlike for some other tribes where citizen hunting is so regulated that it would be impossible to live on what one hunted or fished, for the Crow, many people subsist on the products of their hunting and fishing activities. There is only one major grocery store on the 2,400 square mile reservation and the closest store to Crow tribal headquarters is in Hardin, 13 miles away and significantly further for the other Crow communities. One interviewee described a very difficult time when she and her husband were both between paychecks and she had no food left in her house. She called her mother for food, but her mother had none to share. She picked up her sister and their daughters and headed out to bring meat home for dinner. Sadly, after a full day out, the woman returned home empty-handed; they had seen no game. With increasing food and fuel costs and a stagnant, depressed economy, it is fair to assume many Crow people will continue to try to survive on what they harvest

themselves if the game populations hold out. Although among the Crow people the subsistence need is great, the current approach to hunting yields a high and probably non-sustainable harvest. The Crow are in a classic CPR situation.

Non-citizen activity is another story. That the land base is so large provides both opportunities for wildlife to flourish as well as opportunities for illegal activity to go unrecognized or un-pursued. Realizing they had a problem with poaching, the Tribe elected to sell some permits to non-citizens—if non-citizens were going to be coming anyway, the NRD decided they might as well make money from it. Non-citizen activity is highly restricted, but non-citizens can purchase permits for fishing, predator hunting and turkey hunting. They may also purchase a special permit for a bison. Currently non-citizens may buy tags to hunt antelope; this is a new and temporary program, experimenting with a hunt-for-fee process and motivated by an attempt to cut down on a large antelope population. (Typically Crow people do not hunt or eat antelope.) With approximately two-thirds of the land within the reservation's exterior boundaries being fee land and 25% of the people non-Indian, regulatory and adjudicatory jurisdiction are complex for the Crow Tribe, and the game wardens in particular. The Tribe itself lost ground in *Montana v. United States* for fish and game matters specifically when the Tribe attempted to exclude non-citizens from any hunting or fishing activities within the reservation. Yet even with non-citizen activity codified, many people believe that poaching still occurs all too frequently on the reservation. Non-citizens are caught regularly trespassing and hunting or fishing illegally and people are aware of some Tribal citizens making a profit from accompanying non-citizens on these activities.

Despite these challenges, this department has made some major changes in the past few years, and the recent growth and development in the NRD are impressive. All interviewees have the sense that poaching has decreased in recent years. The tribal conservation officers and other law enforcement agents have come to be viewed as legitimate authorities on the reservation, by both tribal citizens and non-citizens, this perception having changed quite a bit in the past few years. This can be attributed in part to training and certification for all of the conservation officers and dispatchers. Over its long history the fish and game department has had employees with varying levels of experience and certification, but under the director hired in 2003, the department is close to achieving its goal of certification for its entire enforcement staff. Additionally, grants have provided for new uniforms and trucks, and officers and hunters alike perceive these visual changes as having a big impact on the authority of the officers: non-citizens can recognize these as signs of authority, and citizens show more respect for the officers. One interviewee commented, “The people around here, too, they won’t take it seriously until you see them in uniform.” In their uniforms and new trucks, the wardens have the ability to confiscate whatever equipment was involved with illegal activity, including guns, fishing poles and vehicles as outlined in their fish and game code. This new presence commands authority at least anecdotally and has had the effect of curbing poaching, trespassing and other illegal behavior related to natural resources. Measurable data on these kinds of activities are somewhat elusive in any context, but for this particular department, data are particularly difficult to come by. Interviewees had a strong sense

that fewer non-citizens were engaging in illegal activity on tribal lands, and many perceived that healthier and more abundant wildlife were a result of this decrease.

The positive changes since 2003 all seem to stem from the assertion and dedication of the director and his staff. One big boost came from the efforts of the director's wife who, as an NRD employee, has secured over \$4 million in grants in just a few years. This money and new expectations have enabled the hiring of additional law enforcement and provided for their training. Other department staff members give the director and his wife most of the credit for the NRD development. The strengths the director and his team bring to their positions are maximized by the longer terms set forth for the tribal chairman in the tribe's new constitution. With a longer term, the director has had more time to build his department, learn from experience and follow through with departmental planning.

Nevertheless, the institutional arrangements in this government still discourage motivation for long-term planning. A new tribal chairman will again have the power to replace the director, and a new director may want to bring in new employees, either on his or her own or at the behest of the new chairman. The resulting employment uncertainty has consequences. Employees who may be jobless under the next chairman have less motivation to excel in their work: if they may not be employed in a few years, they are not held as accountable and they do not reap long-term rewards for jobs well done. Furthermore, they may not have the opportunity to train their replacements. Therefore experience may be almost entirely lost, and professional relationships may be cut and then have to be rebuilt. Outside understandings of the right contacts within the

Crow governmental system are muddled. However, although there is continual turnover in the department as each new chairman takes office, there is a surprisingly large amount of experience among the current conservation officers. Many of them have worked off and on in the department, depending on the political tide. Their experiences in law enforcement as well as their knowledge of the terrain are invaluable assets to enforcement. One current law enforcement officer is even a former director of the NRD. However, with the massive turnover in directors, the department is by no means operating at maximum efficiency.¹⁸

In addition to employee turnover, the biggest challenge facing the Crow natural resources department is financial. Economic resources are not only scarce for the people, but for the government as well.¹⁹ The NRD would like to hire more officers and support staff and buy a helicopter to help make up the officer-to-acre ratio and improve access to areas with poor or non-existent roads.²⁰ And as mentioned above, they are also hoping to hire a biologist, but are unsure if their pay can compete with other opportunities for trained biologists. In 2008 Chairman Venne was re-elected. If he does not continue to be re-elected, the current NRD staff may be displaced, and their leadership and efforts towards securing additional funding will go with them.

¹⁸ Although all individuals I spoke with were quite willing to share what they knew with me, I could find out little information about the history of the department or even details about operations under directors in the recent past.

¹⁹ This may be changing in the near future. The Crow have made steps towards developing the abundant coalbed methane resources on their reservation; this could result in a significant change in the financial situation of the Tribe and its members.

²⁰ The Crow also own and manage the second largest bison herd in the U.S. (and the largest in Indian Country). The herd of nearly 2000 lives in the Big Horn Mountains. With winter being what it is in that part of Montana, the herd can only be monitored without a helicopter from June until late fall each year when the snow melt and absence of snow allow for access via foot, horse or vehicle.

Outcomes

While wildlife management may be looked at from a variety of perspectives, this department, more than any other case in this study, functions largely as a law enforcement initiative. For the Crow Tribe, current management equates to enforcement. This emphasis on enforcement suggests that the Tribe's focus is, out of necessity, one of maintaining and holding ground. The director as well as many conservation officers expressed their desires to develop more of a scientific approach to resource management. Indeed, in past decades, more rigorous scientific studies of various wildlife populations were conducted, either by the Crow NRD alone or in conjunction with the U.S. Fish and Wildlife Service; however, with current funding limitations and no available biologists, the department is entirely reliant on the services that the U.S. Fish and Wildlife Service and the Bureau of Indian Affairs as well as other federal agencies provide. While the relationship between these federal agencies and the Tribe appears to be amiable and beneficial, the long-term goals of the director and the wishes of individual tribal citizens are to become a self-sufficient tribal department. Economic revenue from non-tribal permits is still small, and the programs may or may not develop further in that direction.

Lack of scientific studies dovetails with the lack of citizen regulation: regulation provides, among other things, information about how many animals are being harvested in any particular season. Currently, the harvest figures are rough estimates based on unsystematic information about how many people actually engage in hunting and fishing activities and to what extent. Overharvesting appears to be a concern for the department and tribal citizens. Although citizens may not be taking more than they have in the past,

without knowing the health and population levels of particular species, a safe and sustainable harvest level may be easily overshoot by well-intentioned hunters and fishermen.

Remarkably, the staff has developed from a handful of law enforcement officers in 2003, only a few of whom were certified, to 14 officers today, all soon to be certified. Eight certified dispatchers take calls on the game wardens' own frequency, sending the officers out to cover the nearly 2.3 million acres of Crow land. While it is somewhat incredible to picture the two to three officers on duty at one time covering such a large land base²¹, their visibility has been heightened by their recent purchases of uniforms, weapons, and trucks. They command more authority, more easily deal with poachers and trespassers, and have fewer hunting and fishing violations overall. A large grant from the U.S. Department of Agriculture will provide for a new building entirely for the fish and game department. Once complete, the building will possibly have a similar effect, illustrating the strength and presence of the department. Additionally, the plans for the new building have already instilled pride in both the department and general tribal citizens. On several visits to tribal headquarters, there was a buzz among the people regarding the new building. Other Tribal governmental offices are housed in a well-worn administrative building.

The Crow natural resources department is very proud of the current work it is doing with the limited resources available, but they can identify the distance between where they are and where they would like to go. When I asked the director if there was

²¹ These 14 officers take shifts to cover every hour of the year.

another tribal program that he used as a model, he said no, that he was looking at his own program as a model and that soon others would be, too. The past few decades have produced new and major legal barriers to Crow sovereignty, but the department staff persists. The director said that he is working for the Crow children: his goals for the NRD are to protect the fish and wildlife—to preserve this “Tribal right” (in contrast to “individual privilege”)—and to help the Crow Tribe buy back land. This Tribe seems to have the potential for a strong department; time will tell what they are able to do with through their new constitution and with increased resources.

2. The Confederated Salish and Kootenai Tribes of the Flathead Reservation

The Confederated Salish and Kootenai Tribes (CSKT) manage fish and wildlife on the Flathead reservation. They are also involved in some fish and wildlife management off-reservation in both ceded territory as well as in off-reservation waterways with dams that affect on-reservation habitat and populations.

Background to CSKT Management

The Confederated Salish and Kootenai Tribes live in northwestern Montana on the Flathead Reservation. The Bitterroot Salish, Pend d’Oreilles and Kootenai people settled on this 1.317 million acre reservation after signing the 1855 Hellgate Treaty with Governor Stevens, ceding over 20 million acres of their homeland in what is now British Columbia, Idaho, Wyoming and western Montana. The Flathead Reservation, just south of Glacier National Park, is considered a paradise by residents and visitors alike. It

contains the beautiful Mission Mountains and approximately half of Flathead Lake—the largest freshwater lake in the U.S. west of the Mississippi River.

In 1904 the reservation was opened up for allotment and a significant portion of the land was sold to non-Indians. For over half a century the Confederated Salish and Kootenai Tribes have worked to buy back land within the exterior boundaries and today control approximately 64% of the reservation. The CSKT citizenship numbers 6,970, but the reservation is home to over 26,000 people, resulting in approximately 30% of the population being American Indian (BIA 2003; Census 2000). The dramatic checkerboard character of the reservation and its attractive natural resources have required the CSKT to interact with non-citizens in ways most other tribes have not. This heterogeneous reservation population is quite educated: 83% have a high school degree or higher (greater than the U.S. average) (Census 2000). Per capita income is \$14,503, nearly the highest in this study²² but still significantly lower than the average American, and unemployment currently sits at around 35% (Census 2000; BIA 2003).

The CSKT has a history of setting a high bar in self-governance as well as resource management. They were the first Native nation to designate part of their land as a wilderness area (after their attempt to establish the Mission Mountains as a National Park died in Washington D.C.), and the Mission Mountains Wilderness Area was designated in 1939. In 1988 they became one of the first ten tribes to participate in the Self-Governance Demonstration Project, a trial of sorts that became the Self-Governance program. They were successful, and consequently in 1993 the CSKT became a Self-

²² Fond du Lac's per capita income is slightly higher at \$15,551 (Census 2000).

Governance tribe. Today they are the largest employer in northwestern Montana through various tribal enterprises, employing approximately 1000 people in this low-density area (Tiller 2005). Some of these jobs are with Mission Valley Power, the local utility company the CSKT controversially took over which now provides some of the lowest electricity rates in the region (Devlin 2008). Particularly, the CSKT have won numerous awards for accomplishments in self-governance and management including the Honoring Nations Award from the Harvard Project on American Indian Economic Development in 2003 for resource management.

Conservation has always taken priority in CSKT tribal affairs. As is demonstrated in language similar to that of other Stevens treaty tribes (such as the Yakama), the people ensured the retention of their hunting and fishing rights through their negotiations:

The exclusive right of taking fish in all the streams running through or bordering said reservation is further secured to said Indians; as also the right of taking fish at all usual and accustomed places, in common with citizens of the Territory, and of erecting temporary buildings for curing; together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land. (Hellgate Treaty 1855)

Since the signing of the Hellgate treaty, these basic rights have been exercised by the CSKT and have served as the backbone of nearly a century's worth of natural resource management. The Natural Resources Department staff and other tribal citizens alike credit their early leaders with being exceptionally socially progressive and environmentally-minded. Tribal Council minutes as early as the 1930s indicate the Council was interested in conservation matters, discussing a potential elk preserve and tribal citizen regulations. That there are detailed records of such matters going back 80

years indicates some level of stability in tribal governance. Furthermore, that these interests showed up during the Great Depression also indicates a serious level of commitment to conservation matters. Around this time the Council also began negotiating with the State of Montana Department of Fish and Game regarding the assertion of tribal hunting rights: the Tribe wanted exclusive hunting rights on the reservation, while the state wanted access. The compromise was an agreement that non-citizen hunting on the reservation would be limited to upland game birds and migratory waterfowl.

In the 1940s the Tribes requested help from the U.S. Fish and Wildlife Service for biological surveys and other related activities. Check station data (to monitor hunting and fishing harvest) also goes back to the 1940s, and traditional check stations existed prior to these. Records in the 1950s and 1960s indicate an increased focus on fisheries and biological surveys, and tribal citizens began working for the BIA in conservation enforcement on the Flathead Reservation. In the late 1970s the Tribes hired their first biologist, and more biologists soon followed as their presence became a requirement from the BIA for massive timber sales. Additionally, the Tribal Council worked to get the reservation designated a Class 1 airshed to be able to set higher standards for air quality. One interviewee, reacting to early Councils and their progressive behaviors, said, “I thought they were crazy, but they were very environmentally driven.”

Mitigation and Capacity-Building

Several water system issues make CSKT management somewhat unique. In 1938 a major hydroelectric dam, called Kerr Dam, was completed on the lower Flathead River

within reservation boundaries to provide power to Montana communities from Kalispell to Missoula and for major irrigation projects.²³ Kerr Dam was built on an outlet of Flathead Lake (a naturally occurring lake), but nevertheless significantly raised the level of the lake and disrupted the fisheries in the system. For the CSKT, the dam was both a blessing and a curse. It has caused damage to a lot of wildlife and fish habitat, but the dam lease and mitigation monies to compensate for the damage have resulted in a steady stream of funds for the CSKT Natural Resources Department, beginning with \$9 million in 1985 and increasing to approximately \$13 million by 2002 (Lake County 2008; Tiller 2005). The CSKT use some of their mitigation funds to buy more land on which habitat is restored. Mitigation funds can also be used to secure grants (by providing matching funds), hire experienced staff, educate and train staff (including support for a program designed to send CSKT citizens to school to fill fish and wildlife positions for the Tribes), provide facilities and equipment, etc. Mitigation funds generally support the fisheries programs more than they do the wildlife programs and consequently the wildlife programs struggle more as they rely heavily on a compacting arrangement with the BIA, through which the tribe manages what amounts to a BIA program; within the CSKT, fisheries and law enforcement are Tribal programs.

The Flathead reservation also encompasses part of the Columbia River system which places it in an entirely different management and financial arena than other tribes in Montana (all of which are further east). Hungry Horse Dam was constructed by the

²³ Rocky Mountain Power began construction in 1929 but progress was halted on and off during this 9 year period overlapping with the Depression (Lake County Directory 2008).

Bureau of Reclamation between 1948 and 1953. Although this dam on the South Fork of the Flathead River lies outside of reservation boundaries, its effects run upstream to the reservation. Consequently the Tribes have received mitigation funds for damages to fish and wildlife habitat caused by this dam as well (Bureau of Reclamation 2008). The Bonneville Power Administration, a division of the U.S. Department of Energy, oversees hydroelectric power produced from dams on the Columbia River as well as others in the northwest such as Hungry Horse. In fact, the Bonneville Power Administration (BPA) produces half of the energy and approximately three-quarters of the high voltage transmission in the Northwest (BPA 2008). As mentioned above, hydroelectric power from damming rivers can produce significant damage to fish and wildlife habitat and populations.

In 1980 Congress made this Bonneville's problem in the Pacific Northwest Electric Power Planning and Conservation Act. Under the [Northwest Power Act](#), Bonneville's administrator is required to repair the damage done to fish and wildlife of the Columbia River Basin by hydropower dams. Bonneville does this by implementing the Columbia River Basin Fish and Wildlife Program developed by the [Northwest Power and Conservation Council](#). Between 1981, when the Council adopted its first fish and wildlife program, and 2005 Bonneville spent more than \$8 billion to implement the fish and wildlife program. More than half of the total is the value of lost hydropower generation and power purchases that resulted when Bonneville ran water through dams to aid fish passage and was not able to use the water to generate power. Bonneville calculates the value of the lost hydropower, and the value of subsequent power purchases, and charges these against its fish and wildlife program as expenses. (Northwest Council 2008)

Consequently, part of BPA's tri-partite mission is the "mitigation of the Federal Columbia River Power System's impacts on fish and wildlife" (BPA 2008). The CSKT share these challenges and support from BPA with the Yakama Nation (and the 11 other Columbia Basin tribes), discussed in the next section of this chapter.

Initial financing from BPA funded the first studies of direct and indirect effects of the Kerr and Hungry Horse Dams on habitat in the 1970s, although these dams were constructed decades earlier. This was a major boost to the CSKT capacity to conduct scientific assessments that would become the basis for restoration management. It also introduced the Tribes to the potential financial support through mitigation. The CSKT officially began their Natural Resources Department in 1982, one year before *New Mexico v. Mescalero Apache Tribe* was settled. The Tribes first contracted with the BIA in 1988 creating the wildlife program, and eventually have taken over virtually all BIA responsibilities (with the exception of irrigation). Today the Division of Fish, Wildlife, Recreation and Conservation is part of the Natural Resources Department. With approximately 50 full time employees, the Division includes fisheries and wildlife programs, a wildland recreation program, fish and game enforcement and an information and education specialist. Approximately 30 of these employees are CSKT citizens.

CSKT Management Today

My first interaction with officials of the Confederated Salish and Kootenai Tribes was remarkably different from that with the Crow. On a very snowy day in late December I drove to Pablo, Montana to attend the Tribal Council open meeting. The Council met in the new Tribal Complex, an impressive building whose main section, viewed from the outside, is shaped like a drum. Inside, the council room is circular, with huge poles heading towards the ceiling where a circular skylight symbolizes the smoke hole for a teepee, the lodge poles “bracing” it open. The Council members sat in a semi-circle, elevated a foot or two above the rest of the room, with new flat-screen monitors

and microphones in front of them. Three secretaries recorded the business affairs as each person who approached the Council spoke from a seat facing the semi-circle, lower as it was on the main level of the room. Council members were friendly and approachable, while the ambience immediately drew respect and awe. Everything about this setting spoke of professionalism and authority.

While the Crow NRD consists of law enforcement officers, dispatchers and managerial and administrative staff, the CSKT Division of Fish, Wildlife, Recreation and Conservation also employs many wildlife biologists, fish biologists, an information and education specialist, a botanist, a wetland and riparian ecologist, habitat restoration specialists, various technicians, and other professionals. In this sense, the CSKT are truly about *management*. Decisions regarding day to day operations are made by the various managers within the Division's departments. Larger decisions however must go to the Council and, in some cases, even be voted on through a referendum in which all enrolled tribal citizens can vote.

The CSKT's overall mission is "to adopt traditional principles and values into all facets of tribal operations and services. We will invest in our people in a manner that ensures our ability to become a completely self-sufficient society and economy. And we will provide sound environmental stewardship to preserve, perpetuate, protect and enhance natural resources and ecosystems" (CSKT 2008). Two culture committees—the Salish and Pend d'Oreille Culture Committee and the Kootenai Culture Committee—have final say on all fish and wildlife management decisions. The culture committees also have the authority to intervene in law enforcement activities and in tribal court. For

example, law enforcement officers may cite someone for hunting a particular species out of season and a cultural committee may excuse that particular act for cultural purposes at any point in the adjudicatory process. Indeed the regulation book for citizens states on its cover, “These regulations will be applied in such a manner as to avoid interference with the cultural and religious practices of Tribal members, as protected by the American Indian Religious Freedom Act of 1978” (CSKT regulations 2007-2008). The culture committees address a special advisory board, discussed below, on non-citizen regulations when needed.

On CSKT land, tribal citizens may hunt and fish most species with very liberal regulations. There are some restrictions on places and times of year, but most species may be harvested without a permit. Elk and bighorn sheep in certain areas require free permits, so that their harvest levels can be carefully monitored. Moose hunting also requires a free permit and in this way the Tribes can work with the state to anticipate the harvests, as most moose are taken off-reservation. Through their treaty, the Tribes have retained the rights to hunt and fish in the “usual and accustomed places.” This right enables Tribal citizens to hunt and fish outside the reservation on “open and unclaimed lands, and other lands as provided by agreement with the State of Montana” (CSKT regulations 2007-2008), under Tribal regulations—not state regulations.

Non-citizens may buy permits to fish on reservation waters with certain restrictions; non-citizen hunting activities are limited to upland game birds (such as pheasants and Hungarian partridge) and waterfowl. Non-citizens who live *within* the exterior boundaries of the reservation buy a special and cheaper permit for these activities

than non-citizens who do not reside on the reservation. This arrangement was reached almost 20 years ago in response to problems related to intensifying interests of non-tribal people wanting to hunt on tribal land. Several national wildlife refuges within the reservation boundaries created habitat that attracted migratory waterfowl, upland game birds—and hunters. For decades, the legality of non-citizen hunting was a particularly grey area. One reservation resident who is not a tribal citizen put it this way: “[The legality of hunting] just kind of slid along under the radar and everyone just assumed that they could hunt and fish wherever they chose, regardless of who owned the property. And, you know, the tribal lands are not public lands.” Although the tribe was issuing recreation permits for any non-tribal citizens to hunt or fish (within tribal regulations) on the reservation, state (non-tribal citizen) residents were increasingly voicing their dissatisfaction with the situation. In fact, it is common that when new actors from expanding markets gain access to resources, they seek alliances with the state to justify their claims or attempt to privatize the resources (Agrawal 2002). Particularly, the non-citizen reservation residents were unhappy with having to buy two permits—one for the reservation and one for outside of it—and with trying to follow two sets of regulations, sometimes on the same piece of land. The CSKT and the State of Montana ended up in litigation in which the judge ordered them to come to an agreement out of court. Consequently in 1990, the Tribes and the state put together a special advisory board consisting of seven members: three tribally-appointed, three state-appointed, and one appointed by the U.S. Fish and Wildlife Service by mutual agreement between the tribal council and the governor. The board is tasked with making recommendations regarding

non-citizen regulations for recreational activities within the reservation. One early recommendation from the board was to develop separate regulations for non-citizens who resided within the reservation than for those who resided outside of it. Although the Tribes would likely forbid all non-citizen hunting and fishing activities if they could, the dual non-citizen regulations have been an effective way for the tribe to respond to these activities that were going to be occurring anyway, legally or not. For the residents, a joint permit allows them to perform these activities within the reservation and also allows them to hunt and fish off the reservation in other parts of the state, under state regulations, at a cheaper cost. (For non-residents, they buy a separate special reservation permit.) This is convenient and cheaper for the reservation residents. The Tribes also benefit because they keep all permit revenue, as the agreement does not mandate splitting it with the state. Revenue from non-citizen activities reached almost \$400,000 in 2006. However, economic revenue is certainly not the focus of the CSKT Division. Board members and CSKT division employees agree that the advisory board has been particularly effective at facilitating citizen/non-citizen as well as Tribal/state relations.

However, these different sets of regulations provide an added complication for both the CSKT people and law enforcement officers. Although before 1960 tribal citizenship status was granted if an individual had any Salish, Kootenai or Pend d'Oreille blood and was born on the reservation,²⁴ in 1960 the Tribes changed their citizenship qualifications to a quarter blood quantum. This change in citizenship qualifications likely

²⁴ Some exceptions were made to this requirement, such as for babies born to military families living away from the reservation.

affected and affects many aspects of CSKT communities and culture.²⁵ Regarding fish and wildlife, this change means that families now consist of individuals with different citizenship statuses. For example, parents born before 1960 may be citizens, but their children born after 1960—with the same blood quantum—may not be. Concerning hunting and fishing, this means that these parents cannot take their children hunting or fishing on tribal land; if they do so, they will be breaking the law as the CSKT regulations for tribal citizen activities forbid engaging in these with non-citizens unless the citizen has a state license and is abiding by state laws. Likewise, sets of siblings, some born before 1960 and some after, cannot engage in the same activities on the reservation.²⁶ This affects off-reservation hunting and fishing activities as well. The CSKT have rights to hunt and fish in their aboriginal territories; for these activities they do not need a state license or to follow state hunting and fishing laws. However, these rights are nullified if engaging in these activities with any non-CSKT tribal citizen. So, if CSKT-citizens want to hunt off-reservation with their non-citizen children, friends or siblings, they also need to buy state licenses and follow state rules.

Enforcement

Fish and wildlife conservation also falls within the Fish, Wildlife, Recreation and Conservation Division. Ten officers—all tribal citizens—enforce the tribal codes for citizens and non-citizens within the reservation boundaries. Because the Flathead

²⁵ In no way do I want to suggest that this change was not the right decision for the CSKT; only their Council, elders, cultural committees and membership could decide that. I do, however, want to discuss the ways in which this change affected fish and wildlife management.

²⁶ There is an exception that “non-member first generation descendant children under 18 years of age may accompany their Tribal Member immediate family member” as long as they do not kill anything and do not enter the designated Tribal Primitive Areas (which are for Tribal members only) (2007-2008 CSKT regulations).

Reservation is a dramatic checkerboard, effective enforcement requires coordination with the state and federal officers who also work in the area. The CSKT officers have fostered a collegial relationship with the officers of these agencies (one of whom lives on the reservation). One officer described this relationship: “My opinion has been that we’re all law enforcement officers. We’ll let the attorneys fight over this jurisdictional stuff. We’ll figure it out as best we can on the field and help each other out.” Additionally, up until 2003 when federal laws changed in response to the September 11th attacks, all the CSKT conservation officers were also certified as U.S. Fish and Wildlife Service special agents, too; no CSKT officers remain USFWS certified. Furthermore, five of the CSKT officers are cross-deputized with the State of Montana, making them certified to enforce Montana state laws in addition to the tribal laws, greatly enhancing their abilities to handle certain violations.²⁷ For example, this gives the CSKT officers the option to bring a case to state court. One officer explained,

There have been times when we could have cited somebody in the tribal court, but we cited them in the state court because we know there’s going to be actual consequences. Because then, it’s a criminal violation. And, I mean, there’s violations outside of this agreement where we can cite non-members in the tribal court. But this situation is saying they don’t show up and they have no regard for tribal court. So if we cite them through state court, then they get actual fines and those fines actually get collected.

In turn, approximately eight state fish and game wardens are cross-deputized with the Tribes.

Because the CSKT have treaty rights to hunt, fish and gather in all “usual and accustomed” places, CSKT law enforcement officers are also involved with off-

²⁷ The CSKT conservation officers are also cross-deputized with the tribal police and so may act in that capacity as well.

reservation activities. For example, the CSKT have been planning a buffalo hunt on public land just outside of Yellowstone National Park in exercise of these rights. The Nez Perce Tribe of Idaho also has treaty rights to buffalo hunt in Montana, and in 2006 they began exercising these rights for the first time in over a century. In anticipation of this event for the CSKT, the tribal officers have been in close communication with the state officers in an attempt to educate them on the treaty rights and the legalities of the hunt. During the first Nez Perce hunt, a tribal citizen killed a buffalo in violation of the law. However, the state officer who responded really did not know how to handle the situation. Consequently, the CSKT officers want to help the state officers understand what the tribal rights are in order to know what they can and should do to most effectively enforce the hunt. In addition to this kind of relationship fostering through communication and good will, in 2007 the CSKT chief game warden and a State of Montana Fish, Wildlife and Parks warden made a joint presentation on interagency law enforcement at the state Fish, Wildlife and Parks annual law enforcement seminar in the state capitol; this was the first time a tribal warden was invited to formally present at this event.

Stream-lined Government

One development in management and governance among the CSKT cited by many division employees and others was the approachability of the Tribal Council and the minimal amount of bureaucracy in the CSKT Tribal government. Ironically, the CSKT government is often labeled as particularly bureaucratic (in the best sense of the word). However, scholars such as Cornell and Jorgensen (2007) reference the well-

planned infrastructure within the government, the expertise of tribal leaders and managers, and a clear understanding of tribal priorities and goals, all of which have helped the CSKT become a leader in resource management as well as in other areas of self-governance.²⁸ Tribal employees in turn speak of the flatter organization in which they are able to act quickly on a new project idea, for example. For the CSKT, tribal council members are elected for four-year terms, and every two years half of the positions of the ten-person council are open for election. As a parliamentary system, this council votes behind closed doors on the council officers (Chair, Vice Chair, Secretary and Treasurer). Individual CSKT citizens do not vote on policy matters; instead they elect representatives from their districts to make all these decisions for them. The positive consequences of such a system are that there are many fewer layers of bureaucracy through which policy needs to pass. Every Tuesday and Thursday of the year the Council has an open meeting in which any tribal citizen (or anyone else) can bring a matter to the attention of the council. (For example, this is the process whereby I discussed my project with Council and received their approval. The same day I was there a veteran sought a small amount of money from the Council to provide coats to the veterans without, and someone from health services discussed the changing location of drug testing for tribal employees.) Such an open forum is a great opportunity for those working in any tribal program to communicate directly with the top decision makers any week of the year. State and federal fish and wildlife managers rarely, if ever, have the opportunity to speak with the legislature, governor, or president.

²⁸ In chapter 6 we will discuss Ouchi's (1980) understanding of clan organizations in which shared goals is one key characteristic.

Outcomes

The CSKT have been pioneers regarding fish and wildlife management for at least the past 80 years. Over the past several decades the CSKT have taken over management of nearly all programs formerly operated by the BIA, and the Tribes have excelled, particularly in natural resource management. Part of their success includes building effective working relationships with other management agencies. In addition to the joint state advisory board, the CSKT have several other joint management opportunities. Particularly, Flathead Lake, half of which lies within the reservation, has been managed through a co-management plan between the CSKT and Montana Fish, Wildlife and Parks since 1989, and this has been a successful endeavor. Additionally, the National Bison Range, run by the U.S. Fish and Wildlife Service, lies within the exterior boundaries of the reservation, and is managed jointly with the CSKT.²⁹ Furthermore the checkerboard mixture of land tenure within the reservation—including tribal, state, federal, county, individual Indian owned fee, and non-Indian fee land—creates interesting and complex management issues, for land tenure determines hunting and fishing rights in addition to affecting all other habitat or resource system management plans. The Tribes have dealt with this by carefully fostering relationships with the state of Montana and the federal agencies in which they can work together while maintaining sovereignty. Additional interactions with the state concern off-reservation hunting and fishing by tribal citizens,

²⁹ In 2006 conflicts between some FWS and CSKT employees resulted in the federal government temporarily ending this joint management arrangement. Officials cited personal differences that grew into professional challenges. In 2008 the formal relationship was renewed with a signed agreement between H. Dale Hall, director of the U.S. Fish and Wildlife Service and James Steele, Jr., CSKT chairman. In attendance were Secretary of the Interior Dirk Kempthorne and Montana Senators Tester and Baucus.

and the on-reservation non-citizen activities; both of these also necessitate amiable relations with the state and thus far these have been achieved.

The Tribes have moved themselves into the position of being not only the authority on the Flathead Reservation but an authority in natural resources in general. Many interviewees mentioned that non-tribal citizens overall recognize how much the CSKT have done for the habitat and resources. For example one non-tribal interviewee stated, “The sportsmen in particular who are off the reservation have a certain level of distrust with the state for actions that they have been blamed for in the past... People have this common feeling that if the state gets involved with the management, it’s the worst thing that can happen.” This interviewee went on to argue that the CSKT are perceived as better resource managers than the state. The Tribes’ demonstrated competence in management has supported their ability to stand up to the state, and claim their authority. For example, “There was a certain contingency among the state hunters that were saying, ‘We’re not seeing moose out there because tribal membership is shooting them.’ So in order to work with the state, we basically proved to them we’re not really over harvesting them: we initiated this permitting system for moose, and everybody had to get a permit. You were only allowed one permit and then you had to turn it in. And that information was shared with the state. Through that, the state realized that they had a poaching problem. So then they ended up tightening up some of their own patrols and changed things.”

To the extent possible, the Tribes have achieved true self-governance and in this light may serve as a model for other Tribes working to achieve this end. Incorporating

their cultural values, they have remained true to their traditions while meeting contemporary tribal needs. Additionally, they have made impressive strides in their efforts to work with state and federal agencies which have both benefited management and mitigated conflict. The results are healthy fish, wildlife and ecosystems, and a Tribal citizenship that has confidence in its government's ability to manage and advocate for the benefit of the Tribe.

3. The Yakama Nation

The Yakama Nation has significant fish and wildlife resources. Management for the Yakama includes on-reservation fish and wildlife as well as major fish resources off-reservation in the Columbia River system and other fish and wildlife resources elsewhere in the Yakama ceded territories.

Background to Yakama Management

The Yakama Nation lies in south-central Washington just east of the Cascade Mountains. Fourteen previously autonomous tribes and bands were grouped together as the Yakama Nation in 1855 under the Yakama Treaty, signed with Governor Stevens. The agreement saw the people, under duress, cede around 12 million acres to the U.S. (CRITFC 2008; Tiller 2005). Approximately two-thirds of the remaining reservation land is forest, rangeland or upland, and Mount Adams lies within its boundaries. A short 12 days after signing, Governor Stevens broke the treaty and declared the reservation open lands for Euro-American settlers. Chief Kamiakin called the confederated tribes and bands to build up their armies and resist the white settlers. The discovery of gold on

the reservation dramatically increased the encroachment of white settlers, and a series of raids and counter-raids made up what is now known as the Yakima War in which both Indians and non-Indians suffered many casualties (Tiller 2005; Center for Inland Northwest History 2009). Some years later under Chief Shawaway Cooahyahhen, the Yakama were able to legally resist allotment under the Dawes Act. Today the Nation controls approximately 70.4% of land within the reservation boundaries and significant efforts are being made to attain more land, particularly critical habitat.

Unlike most other treaty tribes, the Yakama have never altered their treaty or reorganized their government; consequently, the Yakama today do not operate under a written constitution. Rather, they try, to the best of their ability under current circumstances, to follow traditional law seen as having been given to them by the creator, and their treaty rights are the most basic legal foundation for dealing with the states or federal government. Like other Stevens treaty tribes, in their treaty the Yakama retained hunting and fishing rights in their “usual and accustomed” places:

The exclusive right of taking fish in all the streams, where running through or bordering said reservation, is further secured to said confederated tribes and bands of Indians, as also the right of taking fish at all usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing them: together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land. (Article 3, Yakama Treaty 1855)

With their land base significantly reduced, these rights to ceded lands were invaluable and access to the sacred Columbia River was imperative to their livelihood and identity. Despite the explicit treaty language, the 1870s saw large-scale non-Indian fisheries develop along the Columbia River and soon after conflict ensued between Indians and

non-Indians for fishing access. The Yakama began legal battles for their fisheries right away. In 1887 the Yakama won the first fishing rights case ever, *U.S. v. Taylor* (1887), wherein the Washington Territory Supreme Court ruled in favor of the Tribe's treaty rights to fish in "usual and accustomed" places, despite white settlers' attempts to block access to the rivers. In the late 1800s the United States government also filed several lawsuits on behalf of Oregon and Washington Indians who had been excluded from their usual and accustomed places. Some of the court decisions supported the treaty rights, while some fell to the defendants under the conservation clause that allows treaty rights to be superseded if for conservation measures.

Conflict with the State

In the 1930s major hydroelectric power was developed along the main stem of the Columbia River. Significantly, The Dalles Dam was completed in 1957, reshaping the Columbia River and inundating Celilo Falls, the sacred site where tribal leaders gathered to discuss fisheries use and confer about traditional law. "Once Celilo was flooded—that was the gathering place—a lot of that [traditional law] kind of went under, like the falls."³⁰ Along with the dam came restrictions on commercial fishing imposed by the states of Washington and Oregon. In 1968 the U.S. sued the state of Oregon in federal district court for the protection of Indian off-reservation fishing rights in *United States v. Oregon*, and soon the Yakama, Nez Perce, Umatilla and Warm Springs tribes intervened as plaintiffs.³¹ In 1974 Judge Boldt decided *United States v. Washington* (1974)

³⁰ Twenty-seven dams exist today on the main stem of the Columbia River (CRITFC 2008). Tributaries contain dozens more such as Kerr and Hungry Horse Dams affecting the Flathead Reservation ecosystem.

³¹ The state of Washington intervened in 1974 and Idaho in 1985 on behalf of the defendants. The Shoshone-Bannock intervened in 1986 with the plaintiffs (CRITFC 2008).

regarding fisheries in the Puget Sound, and that same year Judge Belloni followed suit by applying Boldt's 50% rule to the Columbia River deciding the tribes have a right to half of the fish produced.³² Judge Belloni ruled that states can only regulate tribal fisheries for conservation measures, and that no state management should interfere with the salmon harvest that reaches the tribes' usual and accustomed places.³³ That same year the Yakama Nation won *Settler v. Lameer* (1974) in the 9th Circuit for the Tribe's right to regulate tribal citizens fishing off-reservation—affirming these rights as *tribal* rights and not individual rights. These landmark decisions dramatically changed the management potential for the Columbia River tribes, assuring tribal access absent state intervention as well as tribal interests in fisheries management throughout the Columbia River Basin.

However, the states continued to resist increasing tribal authority and the 1970s saw a plethora of court cases in which the states' actions were found to be restrictive of tribal rights, often inappropriately under the guise of conservation matters. With new legal backing, the Yakama were proactive in asserting their rights. An early Yakama manager recalls one instance when a tribal citizen wanted to get a feel for the state's response:

He went down to the river and backed [his truck] in, and some game wardens showed up. About two or three patrol cars came in. "What are you doing?" [they asked]. And he was just testing them...He would call on the radio [that he was there]. And he dumped a mess of water into the river. He [said he] was just seeing if the truck would get stuck. The real reason was to see if the state would show up. Then he talked to the tribal leaders and [they said], "Do it again. Put

³² Tribes have rights to 50% of the fish *produced* in the river, not 50% of the harvest. Tribes may opt to leave their proportion in the river which in no way increases the allocation to state fishermen.

³³ In 1975 Judge Belloni applied the 50% rule to the fall Chinook run. In 1976 the 9th Circuit Court of Appeals upheld Belloni's decisions. And in 1979 the Supreme Court upheld the Boldt rulings on the 50% share.

fish in it this time.” And then they arrested the Tribe, took them to court, and lost. But that’s the sovereign issue. We’re talking in recent history of there being cowboys and Indians stuff, you know. This should have been gone a hundred years ago but they still, even in recent history, are real nervous about tribes.

In 1977 Judge Belloni approved a five-year plan for the Columbia River fisheries, creating a formula for harvest shares in the various fisheries and requiring all parties to “diligently pursue and promote through cooperative efforts upriver maintenance and enhancement of fish habitat and hatchery rearing programs” (quoted in Jordan 2006). Consequently a joint tribal-state technical advisory committee was formed. Although this plan was a significant step, it did not meet some important tribal needs, and between 1983 and 1987 the new ten-year “Columbia River Fish Management Plan” (CRFMP) was developed again under court order with new policy and technical committees and mechanisms for resolving disputes of either nature. Disputes continued to arise, and in 1997 the parties to *U.S. v Oregon* attempted to renew or modify the soon-expiring CRFMP. The parties have been unable to successfully negotiate a new long-term plan, and currently rely on short term (two- to three-year) interim management agreements (Jordan 2006).

Four tribes whose traditional lands included significant parts of the Columbia River—the Yakama, the Nez Perce, the Umatilla and the Warm Springs tribes—recognized their common positions in regards to interests in fisheries health and in shared treaty language.³⁴ The Bonneville Power Administration (BPA), discussed in the last section on the CSKT, approached these four tribes and offered them funding to develop an inter-tribal organization, and in 1977 the Columbia River Inter-Tribal Fish

³⁴ Stevens and Palmer treaties have almost identical language regarding rights to hunt, fish and gather.

Commission (CRITFC) was formed to coordinate legal and technical expertise around matters of fisheries management. In many ways, CRITFC functions as did gatherings at Celilo Falls in which tribal leaders met to discuss fisheries matters for peoples who had co-existed for thousands of years. However, with new pressures from dams, development and an ever-increasing non-Indian population, CRITFC was born in many ways out of conflict—to create a unified voice for the tribal interests on the Columbia River. Their fate was tied together: as one interviewee expressed it, “The litigation, especially *U.S. versus Oregon*, went a long ways in demonstrating to the tribes the need for them to be together, both on a legal strategy perspective—one wins, you all win, one loses, you all lose kind of thing—but also then the need for technical expertise and competency to help manage the fisheries.”

Formalized Tribal Management Beginnings

In the midst of this new legal field, in the late 1970s the Yakama Nation formalized their own fish and game management programs, beginning small with just a few non-tribal citizen employees. This was unchartered management territory for the Columbia River tribes, and especially for the Yakama. The one thing the Yakama did know was that they wanted to become managers. One early employee described what the start-up was like:

Basically there was no program, there was no equipment, there was no nothing. And I’m sort of sitting there saying, I wonder what we should be doing. You know? There’s no budget. This is 1979 and so the fish runs in the aquifer were terrible. The fish runs on the Columbia were terrible, and everything’s going to pot. So I went to see [a tribal council member] and said, “Gee boss, what do you want me to do?” [with a note of sarcasm]. He looked at me and he said, “Go do good things for the fish. Come back when you have a problem.”

The leaders were farsighted. Another veteran from the beginning recalls,

These are the visions...[The tribal leaders] wanted us to be professional. They wanted to have their tribal members working in hatcheries and fisheries groups and they wanted their people to go to school...The leaders wanted us to get bigger. They wanted us to grow. They wanted us to exert our authority. They wanted to be in charge of the fisheries. They wanted to have someone they could say, "Is that right? When the state and feds say we can go fish now, what do the numbers mean? Are they truthful numbers?"

They also wanted to move tribal management beyond the reservation and for the department to professionalize in order to do so. Throughout this litigation-laden history, the courts were clear about the tribes' treaty rights including their access to the Columbia River free of any encumbrance. The courts were also clear the state could not regulate the fisheries. The only caveat was that the state could intervene if deemed necessary for the conservation of the species. In order to ensure the conservation of the species and maintain authority, the tribes needed to take a strong professional and scientific approach to management. In just a few short decades they have. The Yakama fish and wildlife programs have developed into some of the largest and most professional in the U.S., in terms of staff and funding, overshadowing many state fisheries departments across the country. About a third of the 200 fisheries and many of the wildlife staff are professionals with college degrees, including masters, doctoral or other professional degrees, and the teams regularly attend and host professional conferences.

Yakama Fish and Wildlife Management Today

Traditionally, fish and wildlife have been enormously important resources for the Yakama people. With serious threats to the fisheries in the last half of the 20th century, fish management in particular moved to the forefront of tribal concerns. Today fisheries

management is handled by the Yakama Fisheries Resource Management Program through which the tribe manages harvests, restores habitat and watersheds, oversees the hatchery, monitors the effects of timber harvest and publishes a tri-annual magazine about Yakama fisheries, among other things with a staff of around 150 employees. Underneath the Yakama Fisheries Resource Management Program is a major and long-term project, the Yakima Klickitat Fisheries Program (YKFP). With approximately 100 employees the YKFP oversees co-management of the Yakima and Klickitat Rivers with the Washington State Department of Fish and Wildlife.³⁵ Largely financially supported through a memo of agreement (MOA) with the Bonneville Power Administration, the YKFP is one of the largest and most complex fishery conservation projects in the United States. YKFP operates three hatcheries: one of which was transferred from the state to the Tribe—a first of its kind. Together these hatcheries produce and raise four to five million fish annually.

Although the Yakama fisheries program has been well-funded by BPA and other sources, fish management is stepping up a notch with a recent historic agreement. In May 2008 the Yakama Nation, along with the Umatilla and Warms Springs Tribes, has signed a new MOA with BPA, the Bureau of Reclamation and the U.S. Army Corps of Engineers. This agreement has come out of the *U.S. v. Oregon* management plan in accord with the biological opinions. It provides nearly one billion federal dollars for habitat, fish hatcheries and harvest projects, with \$330 million allocated to the Yakama

³⁵ These job positions are significant for the Yakama people for whom high school degree attainment is low at 56.4% and unemployment fairly high at 57% (Census 2000; BIA 2003).

Fisheries Resource Management Program, one of the largest MOAs for mitigation in United States history.

A small portion of this money is allotted for wildlife, and historically wildlife management has taken something of a backseat to fisheries among Yakama programs³⁶. However in the past five years, wildlife has also come to the forefront. Housed in the Wildlife, Range and Vegetation Resources Management Program, these efforts consist of a wide variety of programs including a wild horse management plan, sensitive species including a spotted owl project, overseeing grazing permits and timber sales, conducting meadow projects and sage grouse reintroduction, public hunting, habitat restoration and acquisition, range management, invasive species management, and buffalo programs. These are overseen by a team of professional habitat and wildlife biologists, a range ecologist, an archaeologist, and other administrative staff, totaling about 40 employees. When I first met with the wildlife director my initial question was broad: how do you manage wildlife for the Yakama? Before responding, he asked that I turn off the recorder and refrain from writing, explaining that some things are so sacred they should not be limited to words, and that some laws are not written down for a reason. Then he told me the creation story. Although I cannot recount the story here, it is important to know that the creation story is essential to understanding wildlife management for the Yakama people. When resources are limited (even if more plentiful for this tribe than for most

³⁶ Approximately \$1.5 million of the MOA funds will go to the Yakama wildlife programs annually. Approximately five percent of the wildlife programs' costs are covered by the Yakama tribe; the rest of the costs are covered by grants or federal funding.

others), management prioritizes the care of each resource in relation to its role in the creation story.

In both the fisheries and wildlife arenas, proactive management includes incorporating management beyond tribal lands to encompass entire ecosystems. The fisheries director explained, “We’re out there and actively involved and we’re also pushing individual landowners, trying to work with them and if we can’t, maybe to encourage them through legal means to address impacts to fisheries and streams on their property.” For the wildlife folks, this also involves actually purchasing or otherwise long-term leasing important land parcels and restoring habitat in these sections as they become available. For the Yakama programs, this kind of habitat restoration *is* cultural restoration—and fish and wildlife management is cultural management. When restoring a flood plain, for example, cultural and traditional uses of the area are taken into consideration in the development of the engineering plan. Old photos are used to try to restore the land to pre-agricultural, pre-development days. Traditional knowledge is typically provided by individuals working in the programs known to be experts in those areas. Traditional expertise is also offered by folks with the Yakama cultural program who have become more involved in recent years at the request of the management programs.³⁷ Overall, these efforts are extremely successful. In fact, in one restored area, native species have come back after having been gone so long that the elders do not recognize them, and yet there is written record of their traditional importance.

³⁷ Interestingly, it was particularly a non-tribal staff member who requested the assistance of a reluctant cultural programs group.

The wildlife programs also manage for tribal citizen and non-citizen hunting and fishing. Yakama Nation tribal citizens' hunting activities are regulated somewhat more than are Crow and somewhat less than are citizens of the Flathead Reservation. Generally, permits are not needed and most species may be hunted at any time of year. The only exceptions are prohibitions on hunting mountain goats, bighorn sheep and pronghorn antelope in general, or female deer or elk during part of the year. Any of these restrictions may be overridden with a special permit granted by the wildlife programs. Otherwise wasting and spotlighting are the only restrictions for tribal citizens hunting on the reservation. For the most part, the same hunting regulations apply off-reservation in the ceded areas as well. As for tribal citizen fishing, there are no permits or fees, but species, harvest levels and seasons for both on and off the reservation are very carefully outlined.

Non-tribal citizens on the other hand are highly restricted from hunting and fishing on lands belonging to the Yakama Nation. The Yakama Nation has actually regulated non-citizen hunting since they started a public hunting program in 1952—perhaps the earliest program of its kind in the country. Today non-citizens can purchase a joint hunting/fishing permit allowing them to hunt upland game birds and small game in particular designated areas of the reservation. These activities as well as non-citizen fishing are also restricted with limits and seasons.

Day-to-day management decisions are formulated by department staff and then brought to the fish and wildlife committee, a subgroup of the tribal council. Although committee involvement is not a requirement, the managers want to keep the committee

involved and, out of respect, keep them informed. However, major decisions are approved by the tribal council, and other decisions go beyond that to the general council. In general council meetings, all tribal citizens present vote with raised hands. This is clearly a very open process that can be problematic as votes are not anonymous; additionally, if a particular citizen feels strongly about an issue, they can lobby friends and relatives to flood the council on a particular voting day.

Regulations are monitored and enforced by ten conservation officers housed in the Yakama department of public safety, outside of the natural resources department. Although these officers are not cross-certified with the state or federal agencies, they are commissioned as tribal police officers and therefore respond to a variety of enforcement matters on the reservation. Enforcement of Yakama fishing regulations along the Columbia River also falls under conservation officers' responsibilities.

As is the case with the Confederated Salish and Kootenai Tribes, formalized Yakama fishing and hunting regulations can be superseded by traditional needs. Many Yakama people are still considered to be very traditional and practice religion in the longhouses. For many tribal citizens, a traditional funeral involves six days of mourning during which the family of the deceased hosts meals for several hundred people at a time. These meals necessitate elk or deer, which may need to be harvested outside of formalized hunting seasons. Tribal citizens may obtain special permits for these activities. However, if a tribal citizen is caught hunting or fishing outside of the posted seasons without a permit—or if they break traditional laws that are not codified (keep in mind the director's handling of the creation story)—the tribal citizen may request of the

tribal court a traditional court hearing for which the tribal court will appoint a council of elders to rule on the traditional matters.

Enforcement

Enforcement for the Yakama is a difficult task. Because of the rights to hunt, fish and gather in the ceded areas—legally Yakama people are under Yakama regulations on these lands—the Yakama Nation is also responsible for enforcement of these regulations throughout the nearly 12 million ceded acres. Consequently, the ten Yakama fish and game wardens attempt to enforce on the nearly 1.4 million acre reservation as well as any tribal activity in the ceded area. Currently, most tribal activity happens along the Columbia River (where approximately 90% of the river fishermen are Yakama), but Yakama officers only occasionally make it down to the river to patrol.³⁸ With only a few officers on any one shift, this has posed some problems. On zone six of the lower Columbia River, CRITFC has its own enforcement officers, granted jurisdiction by the CRITFC member tribes.³⁹ The CRITFC officers have become the authorities in the area. They are knowledgeable about both Washington and Oregon State laws—and are cross-deputized with Oregon—so they can legally and knowledgably respond to any need in the area or walk another officer through the process if necessary. However, recently the Yakama council has decided to withdraw Yakama enforcement certification from CRITFC officers, making them no longer Yakama sanctioned to enforce Yakama laws on Yakama tribal citizens. As a sovereign nation, the Tribe has decided not to transfer that

³⁸ During the commercial season, Yakama officers have a strong presence on the river.

³⁹ This makes for a very interesting enforcement role as CRITFC officers enforce Nez Perce, Umatilla, Warm Springs, and Oregon regulations. (The State of Washington certifies officers by county, so the CRITFC officers may be getting certification in Klickitat County.)

jurisdiction. On the Columbia River, what this means is that if the CRITFC officers encounter Yakama citizens breaking Yakama code, rather than issuing a citation themselves, they will now report that incident to the Yakama wardens. However, if Yakama enforcement does not respond, the CRITFC officers, feeling that something needs to be done, either respond as Oregon state officers, or send that information on to other enforcement agencies for the state of Oregon. Essentially, either way, the CRITFC officers are placing regulatory jurisdiction in the hands of the state whereby the Yakama offenders will be tried in state court—exactly the opposite of the CRITFC mission. This has caused morale issues among the CRITFC officers who are torn between doing their duties as enforcement officers and supporting the mission for which CRITFC was organized. In this interesting situation, CRITFC enforcement—organized to keep the state at bay—is forced to challenge tribal Yakama authority.

Outcomes

One of the biggest responsibilities of the fish and wildlife programs is to be self-sufficient. Yakama staff in both arenas work diligently to bring money in to support their programs, and they are so successful that very little tribal money goes to either program. Grants, BIA-638 contracts and mitigation MOAs support most activities, and funding from fishing and hunting permits to non-citizens entirely supports the public hunting/fishing program.

Although no revenue actually goes into general tribal coffers, the fish and wildlife departments have grown from a few employees in the early 1980s to about 200 today and this is expected to increase by 40 in the next few years with the newest MOA. For these

employees, the departments make serious efforts to develop tribal citizen human capital.

Such large departments offer flexibility that allows individuals to pursue their interests:

There's a lot of capacity to build on... If you bring somebody in that just has raw talent, you can start using other people, technical people, to develop that. And then as they develop—they develop interests and they develop skills—you can plug them into the right place. That's nice about having an organization of this size.

Additionally, the fish and wildlife staff are planning for future tribal employees. The Yakama Natural Resources department puts on an annual summer camp called Native American Wildlife and Kids (NAWKI) for enrolled tribal children to foster interest in natural resources. New full-ride scholarships are also available for college studies in natural resources. More and more young Yakama people are getting their degrees and are competing for jobs with the Tribe, which in turn allows the programs to be more selective in tribal citizens they hire, raising the bar and increasing their professionalism.

These efforts also instill pride at individual and societal levels. One non-citizen manager described this well:

If nothing else, if we never save one fish, what we have is people feeling better about themselves as a culture. When we wanted to restore salmon and rebuild runs—if nothing else, we've allowed individuals to feel better about themselves... You start getting people with pride in themselves again. They have jobs, and people need jobs. They need to feel self-respect, need to feel self-worth and you always tell them what a great job they're doing and how important what they're doing is—not just for their people but for the culture... And you want them to be proud of themselves as a people. I've seen them not being proud of themselves as a people and that's been pretty sad to me. So like I said, if nothing else, this whole fisheries thing, even if we dipped all the runs for the pot, if nothing else, this has been a way to get people feeling better about themselves.

Yet the Yakama fish and wildlife programs have taken impressive steps in management and the health of the fish, wildlife, and habitat are reflections of these

efforts. The fisheries have come back in the last thirty years from near total depletion. And wildlife populations are thriving across the reservation, including 21,000 acres of habitat that has been restored in the past twenty years.

Furthermore, “The tribes have done tremendous work in the rivers, in the riparian areas, but if you look over the last...five or six years, where the notable successes have been, they have been in the courts.” In the past decade the Yakama tribe has taken the State of Washington to court about a dozen times for overstepping its jurisdiction and citing hunters on the Yakama reservation tribal lands. The Tribe has been very successful in fighting these cases so that every one of them “gets tossed out so fast it makes your head spin.” One non-tribal staff member summed up his philosophy on these assertions by saying, “You know, it’s just like anything else. If you want to have the right, you have to take the responsibility.” Today there is no state or federal influence on management matters for the Yakama and no interference outside of federal funding. The Tribe has taken over management of the state hatchery on the Klickitat River. The Yakima hatchery is one of the most developed in the country and serves as a showcase for others. And the recently signed MOA with several federal departments is evidence of the Yakama coming to their own. They are authorities on resource management, and true players at the table.

4. The White Mountain Apache Tribe

Management for the White Mountain Apache Tribe involves significant fish and wildlife resources on the reservation. The White Mountain Apache Tribe does not manage fish and wildlife off-reservation.

Background to White Mountain Apache Management

The White Mountain Apache people live on a remainder of their traditional homeland, the Fort Apache Indian Reservation, located in the east-central highlands of Arizona. This 1.68 million acre reservation includes desert lowlands, vast canyons, and heavily forested mountains with elevations reaching from 2,600 feet in the Salt River Canyon to above 11,400 feet on the Apaches' sacred Mount Baldy. The White Mountain Apache people traditionally lived between the Pinaleno Mountains in the south and the White Mountains in the north, although they traveled extensively outside these boundaries to engage in trading and raiding activities. The reservation itself was established by Executive Order in 1871 after it became clear that the military powers of the Territory of Arizona were not capable of exterminating the Apaches and that the Apache people also needed protection from local Anglos who practiced genocide to establish their own foothold in the area (Tiller 2005).⁴⁰

Today most of the approximately 13,300 enrolled tribal citizens live on the reservation, virtually all of which is held in trust for the White Mountain Apache Tribe

⁴⁰Tribes whose reservations are established by Executive Order generally do not retain hunting, fishing or gathering rights outside reservation boundaries, as do some treaty tribes who have ceded territory. The White Mountain Apache did not retain these rights off-reservation.

(WMAT).⁴¹ The people believe this land is sacred, given to them by the Creator. They also consider their homeland to be the most beautiful area in the world. Outsiders have agreed. Major John Green of the U.S. first cavalry, sent to the White Mountain Apaches to negotiate peace and the reservation in 1869, remarked:

I have selected a site for a military post on the White Mountain River which is the finest I ever saw. The climate is delicious, and said by the Indians to be perfectly healthy, free from all malaria. Excellently well wooded and watered. It seems as though this one corner of Arizona were almost its garden spot, the beauty of its scenery, the fertility of its soil and facilities for irrigation are not surpassed by any place that ever came under my observation. Building material of fine pine timber is available within eight miles of this site. There is also plenty of limestone within a reasonable distance. (WMAT 2008)

Recently, longtime WMAT Chairman Ronnie Lupe remarked to a visiting journalist,

"The trees talk to you, the mountains, springs...tranquility...Soak it in and then you can go home. You know that you have been to the most beautiful place in the world"

(Dungan 2007). Perceptions aside, however, the importance of the land in connection with the people is perhaps best evidenced by the Apache's own word, *ni'*, which means both "land" and "mind."

With abundant natural resources and a large land base, people from near and far are attracted to a wide variety of outdoor recreational opportunities offered by the WMAT, including hunting, fishing, canyoneering, a unique rent-a-lake program, camping, and backcountry tours. These activities are administered by the Tribe's Wildlife and Outdoor Recreation Division (W&ORD), which is also responsible for the management and conservation of fish and wildlife. The W&ORD's track record of

⁴¹ All of the land within the reservation boundaries is trust land with the exception of 43 acres of fee simple land owned by the Eastern Lutheran Mission in the East Fork area of the reservation near the town of Whiteriver, the largest town on the reservation and the tribal headquarters.

management throughout the tribe's 1.68 million acres—including over 600 miles of cold streams and approximately 30 artificial lakes—is impressive.

Early Assertions of Tribal Authority

Tribal authority, in natural resources and other arenas, has been hard-earned by the White Mountain Apache Tribe. One early, significant sovereignty-affirming battle took place over the construction of Hawley Lake, named after the BIA agency superintendent at the time. In 1956, under guidance and pressure from the BIA, the WMAT began the creation of Hawley Lake by damming up Trout Creek to form a large lake. The plan was for the new lake and surrounding grounds to serve as an outdoor recreation site. The BIA recommended that the Tribe offer non-Indians the chance to lease home sites for 25-year terms and build summer homes on them around the lake. This project was designed to stimulate economic development for the Tribe and provide jobs for tribal citizens. The BIA also believed that this effort would socialize the White Mountain Apache people into the non-Indian community. The plan was thrown for a loop when it caught the attention of the Salt River Project (SRP), which administers water delivery to the major urban area of Phoenix through the Bureau of Reclamation, pursuant to a contract with the Secretary of the Interior. The Hawley Lake plan, in SRP's view, threatened to jeopardize water flow downstream—about 60 percent of the Salt River system watershed for the Phoenix metropolitan area lies within the high mountains of the White Mountain Apache reservation, the headwaters of the Salt River. In an effort to halt the project, the SRP sued the non-Indian contractor hired by the Tribe for the project. With the contractor suspending work, the Tribe was determined to finish the project on

its own and set up a barricade on the road to the lake site to prevent outside interference.

The Salt River Project obtained a state court injunctive order, and brought a busload of armed deputies to break the barricade. In response, the Apaches armed themselves with rifles, pistols, and shotguns of their own. It was an armed standoff, effectively alerting the public and the federal government that the WMAT was not going to back down.

Hawley Lake was completed and the Tribe has subsequently developed approximately 30 more lakes, greatly expanding fishing and other recreation opportunities on the reservation.

Unfortunately, the Hawley Lake project ended up being an excellent deal for the lessees and an increasingly bad deal for the Tribe. Lessees' contracts, completed under BIA supervision, contained no rent escalation clause, allowing the non-Indian lessees to pay the same lease fees (about \$80 annually) for a lease term of 25 years. In order to correct this inequity, the tribal attorney and Tribal Council met with the Hawley Lake Homeowners Association in the mid-1970s to try to negotiate a cost of living inflationary index as part of a new lease, which would be renewed for another 25 years. The Tribal Council was strongly rebuffed by the Hawley Lake Homeowners Association. They reminded the Apaches of the written contract, which effectively froze the rent. At one time there were 410 leases and the total income was \$64,000 annually, not even enough to pay for the garbage pickup that was the Tribe's responsibility under the lease. Consequently, when the first of the leases was up for renewal in 1984, Hawley Lake was once again a site of confrontation.

Under the leadership of Chairman Ronnie Lupe, the Tribal Council decided not to renew the leases for non-citizen homeowners who had benefited from decades of below-market priced leases. While such a decision was within the legal rights of the Tribe and was an economically rational business move, the homeowners association strongly reacted; some individual homeowners even made anonymous death threats to the Chairman. Following this decision, the Chairman had FBI security with him on some off-reservation visits for a period of time. Some attempted to bribe the Chairman with money. He remembers the trauma his family went through in fear for their lives (Wilkinson 2005; Dungan 2007). The homeowners association petitioned Arizona's U.S. Senators to try to get a bill through Congress to remove Hawley Lake from the reservation and deed it to the non-Indian lessees as their fee simple land. When their efforts failed, some homeowners chose to burn their cabins to the ground rather than allow them to fall into the hands of the Apache Tribe. Others chose to move their cabins off the lake and off the reservation, cutting the bigger cabins into sections. And others donated their cabins to the tribe's nonprofit, 501 (c)(3) Community Development Corporation (CDC) and received a charitable tax write-off. In a final attempt to gain control over the land, the homeowners association filed a lawsuit under an old federal Indian Depredations Act. Eventually all of the legal efforts failed, and one by one the leases expired, not be renewed. The Tribe and its leaders had made a decision in their best interests and stood by it, despite powerful opposition. Currently, the CDC manages the cabin rentals on a daily, weekly and monthly basis and has an ongoing program to restore and refurbish the cabins for summer tourists.

Managing for Their Own

The events surrounding Hawley Lake strengthened tribal sovereignty and set the stage for self-governance in other arenas. The White Mountain Apache Tribe attempted formal management of fish and wildlife resources beginning in the 1940s with a tribal program called “Recreation Enterprise.” The program sold camping and fishing permits to non-tribal tourists, and these permits were verified by (uncertified) tribal wardens.⁴² However, up until the early 1980s the Tribe had minimal control or input regarding management activities on the reservation, particularly concerning authority over non-citizen fishing and hunting on tribal lands. For decades, the Arizona Game and Fish Department had been issuing licenses to hunters and fishermen, and state officers enforced state regulations regarding seasons and harvest levels. In the 1970s, tribal game and fish staff began to seriously question the authority—and ability—of the state to manage fish and wildlife on the reservation. Among their concerns were: 1) the state’s liberal licensing allocations, which were problematic from a conservationist standpoint, and 2) the fact that revenue from activities on reservation land went directly into the state coffers.

In a very proactive move, the White Mountain Apache Tribe began its own trophy elk hunts in 1976, paying the State of Arizona the hunting permit fees under protest. Three years later, the Tribe sued the State of Arizona in the U.S. District Court of Arizona to enjoin state jurisdiction on the reservation game and fish management and licensing matters. The case went to the Ninth Circuit Federal Court in *White Mountain*

⁴² At this time, certification of tribal wardens was not yet institutionalized.

Apache Tribe v. State of Arizona (1981). The Ninth Circuit remanded the case back to the federal district court of Arizona for a factual determination of the extent of the state's interests in the management of the reservation's game and fish program, as measured by the state's financial and on-reservation management contributions. The Court's remand further suggested that the extent of wildlife migration between the reservation and state lands might justify a sufficient state interest that would warrant the licensing of non-Indian hunters and fishermen or other state authority.

During extensive pre-trial discovery from 1981 to 1983, the Tribe proved that the federal government had such enormous influence on funding and management matters that it effectively pre-empted any state authority.⁴³ Furthermore, the Tribe demonstrated its competency and professionalism in the realm of wildlife management through its codified fish and wildlife regulations, as well as teams of biologists, technicians and enforcement officers. In fact, it was the deposition of tribal elk biologists that disproved the state's migration theory.

In 1983, at the same time that the White Mountain Apache Tribe's case was in the discovery stage, the U.S. Supreme Court ruled in *New Mexico v. Mescalero Apache Tribe* (1983) that American Indian tribes had retained inherent sovereign authority to manage fish and wildlife resources on their own land (as discussed in Chapter One). The WMAT filed an Amicus Brief with the Supreme Court in support of the Mescalero Apaches.

Consequently, the parties in *White Mountain Apache Tribe* entered into a stipulation for a

⁴³Concurrently, in 1980 the WMAT won the Supreme Court case *White Mountain Apache Tribe v. Bracker* (1980) which established that the State of Arizona did not have the right to tax a non-Indian logging business operating on the reservation pursuant to a contract with the Tribe's sawmill. This strengthened tribal sovereignty as well as reaffirmed the BIA's preemptive role and trust responsibility.

declaratory judgment and permanent injunction, with the State of Arizona and the Tribe agreeing that the case conformed to *Mescalero Apache Tribe*. The federal district court declared that the “application of Arizona’s hunting and fishing laws to the Fort Apache Indian Reservation or to the hunting or fishing activities of any person within the exterior boundaries of the Fort Apache Indian Reservation interferes with tribal self-government and is preempted by federal law.” (See *White Mountain Apache Tribe v. The State of Arizona, Department of Game and Fish* 1983). The state was required to return the permit money previously paid by the Tribe under protest, to pay the Tribe's attorney fees, and to inform the public that state hunting and fishing regulations do not apply on the reservation. Additionally, the state was permanently enjoined from entering the reservation without the written consent of the White Mountain Apache Tribe.

This governance milestone reflected and reinforced the WMAT’s perspective on how to approach similar jurisdictional disputes. As summarized by the tribal attorney in *White Mountain Apache Tribe*: “Our philosophy was that if you wanted to win a tribal sovereignty dispute with the state or federal government, you had to have an established body of laws and trained people to enforce them in order to preempt state and federal activity in the same arena. You cannot bring a lawsuit in a legislative vacuum.” From that point on, the WMAT has increased its capacity to manage its natural resources and to exert jurisdiction over those who wish to harvest or use them.

White Mountain Apache Fish and Wildlife Management Today

Clearly, natural resource management is a particularly longstanding tradition for the White Mountain Apache people. In the 1980s the WMAT began to completely take

over fish and wildlife management and game ranger law enforcement responsibilities from the BIA through P. L. 638 contracts with the BIA and established the Wildlife and Outdoor Recreation Division. The W&ORD, under the Natural Resources Department, now operates with approximately 40 full-time staff and 70 seasonal staff—all of whom are tribal citizens except for the spouse of a citizen and the director of 30 years. The W&ORD itself manages a law enforcement division and teams of biologists, technicians and staff focused on conservation issues, including sensitive species, sport and native fish, wildlife, and habitat restoration. The W&ORD also provides management oversight in two for-profit arenas: the outdoor recreation department handles camping and other recreational activities, while the trophy hunting program focuses on the Tribe's world-renowned trophy elk hunts and other big and small game hunts.

With approximately 100 professionals, the W&ORD covers a wide variety of conservation matters, from surveying the Mexican Spotted Owl and monitoring reintroduction of the Mexican wolf, to testing water quality and evaluating fish populations. While other tribal programs in this study focus mainly on addressing tribal citizen needs and wishes, the WMAT also works hard to attract and accommodate non-citizens—although ultimately, this practice also serves tribal needs and would undoubtedly be curtailed if it did not. In fact, like many other tribes, the WMAT first began offering and regulating outdoor recreation for non-citizens because non-citizens were coming anyway and the Tribe decided to make this inevitability work to their advantage.

In fact, along with the San Carlos Apache programs, the WMAT programs stand apart from the management programs of most other tribes insofar as they are quite restrictive on tribal citizen activity. No other tribes in this study have revenue-generating activities which restrict tribal activity.⁴⁴ For example, the W&ORD has developed a unique and innovative “rent-a-lake” program wherein lakes that have not experienced much activity by tribal citizens may be entirely rented out to non-citizens for a set period of time, thereby restricting tribal citizen use. This program has been extremely successful in that lake reservations are now booked throughout the summer and revenue from these programs is significant; currently the program is expanding to other lakes. At the same time, this program is balanced with lakes reserved entirely for tribal citizens as well.

The WMAT also charges its citizens to hunt, requiring them to buy permits according to seasons and limits, a practice which it has followed for 15 years. Permit costs range from \$3 to \$400 and are valid for limited seasons which could be anywhere from two to four weeks, depending on the species. The number of deer, antelope, javelina, and turkey permits are limited and may only be purchased if available. (The number of citizen permits for black bear, mountain lions, coyotes, fox and other small game is unlimited or there is no permitting.) In fact, WMAT citizens can no longer be

⁴⁴ Certainly, conservation activities may require restriction of tribal member activity. For example, managers may decide to close an area of tribal land to all hunting so that a particular species may recover.

subsistence hunters, as the seasons are limited enough that the food from harvests will not last all year.⁴⁵

The longtime director of the W&ORD credits their success in part to precisely such restrictions. “The first thing you have got to do is control all the Tribal member hunting with season dates and set regulations for them,” he explains. “That’s the first step with most tribes...They can’t get a hold of [tribal members]. And when you can’t do that, you can’t have a trophy program.” Because the trophy elk hunting program in particular is so successful for the WMAT—producing significant revenue and prestige for the Tribe, and pride among the Tribal citizens—trophy bull elk also cannot be harvested by tribal citizens at will. These restrictions are important for conservation as well as economic measures: for example, deer, the most prized big game, were discovered to be over-harvested on the reservation decades ago, so today the deer are carefully managed to ensure the continued health of the population

Meanwhile, financial success and conservationism must necessarily be sought in consideration of tribal citizen needs. Although technically restrictive, some of the management activities mentioned above do not generally interfere with traditional customs. For example, the people did not traditionally hunt elk. Consequently, a trophy elk hunting program initially did not directly interfere with tribal citizens’ activities or beliefs. Additionally, tribal citizens did not traditionally subsistence fish for cultural reasons as well. Therefore, allowing non-citizens to buy tribal fishing permits to fish in

⁴⁵ There is a grocery store in Whiteriver, the centrally located community that is also the location of Tribal headquarters. This is in contrast to some other tribes where grocery stores are nonexistent or far from reservation communities, making subsistence hunting and fishing more of a necessity.

tribal waters was also not initially contentious. Such tight regulations on tribal citizens are only pipe dreams for tribal management programs elsewhere where managers would like to better regulate citizen activity for the sake of the resources or for the potential for a lucrative public hunting program but are unable to do so. Many interviewees from other tribes cited cultural and historical norms which have enabled tribal citizens to hunt or fish freely. These sentiments are present among WMAT citizens, too. Furthermore, in recent years, WMAT citizens have begun to camp and fish more often, some finding themselves upset with, for example, programs that reserve certain waters for non-citizens. (It is important to note, however, that some waters are also exclusive to tribal citizens.) Similarly, there is a growing interest, which seems to be particularly among young people, in harvesting antlers for show or sale, and trophy bull elk antlers are the most lucrative. However, the WMAT has been able to achieve effective regulation in part because of extensive education and outreach on the part of the W&ORD staff, and because the W&ORD staff and WMAT tribal council work hard to respond to changing practices and various constituents' needs. Citizen hunting and fishing restrictions are developed and adjusted with changing Apache cultural practices in mind. The W&ORD staff members host various public meetings in communities around the reservation to discuss changes with and receive feedback from the public. The W&ORD then annually proposes regulations to the Tribal Council. It is partially through these processes that the staff is able to consider regulatory adjustments. For example, elders who hunt for sustenance regardless of antler points complained that the meat did not taste good during the time of year established for hunting big game. Consequently, elders have a season

now that starts earlier to accommodate for their tastes. It is also through these forums that the staff are able to communicate with the public the intentions of the regulations and their benefit to the Tribe and its citizens. In part, the program staff members make the persuasive argument that tribal permit fees go back to the Tribe and that regulating tribal citizens ultimately means a stronger non-citizen program which provides even greater profits for the Tribe to support other tribal programs. One W&ORD employee said, “The feedback we get from [tribal members] is, ‘It’s my land.’ Yes, it’s your land, but we have people that are employed to take care of these amenities. Somebody’s got to learn to pay for these things. That’s what we’re trying to get across to them. And in certain ways, a lot of tribal members are recognizing these things.”

Indeed, flexibility and persistence have been important aspects of the W&ORD’s success. Staff continually talked about this process with statements such as this one from a W&ORD staff member: “Sometimes it takes a little time and takes a little tweak here and shift there, and it does well. You just have to hang in there. If a lot of them are really good ideas, if you don’t give them enough time to grow, they don’t develop.” As an example of this ongoing adjustment process, the aforementioned trophy bull elk hunts now offer a top-of-the-line hunting experience for a premium price, but this program did not develop overnight. When the trophy elk hunting program started in the 1970s, permits were sold for around \$1,500. These fees were then raised and lowered in relation to the market and the demand. Over time, the department has built a solid reputation while testing and refining its elk management practices, such that today the \$17,000 permit

includes an extensively trained guide and camping services many would call luxury, including excellent meals and new tents with comfortable cots and other amenities.⁴⁶

A similar set-up is provided for the unique fishing camp at Christmas Tree Lake, where fishermen have the opportunity to catch a rare threatened Apache Trout to the tune of about \$250 per day. The program has grown substantially since its inception, requiring various adjustments and course corrections along the way. Thus, trial-and-error is the mode of operation for the WMAT management, as new ideas are tested, adjusted and tested again. This suggests a willingness on the part of current and former tribal leaders and directors to take measured risks.

Unique among the tribes in this study, the WMAT also has a carefully developed program to provide guiding services for hunters. Over time, the WMAT has adapted its approach and now offers a unique, and what they see as very effective, service to hunters. Tribal citizens interested in guiding register with the W&ORD to take a series of courses, from CPR and customer service to photography and animal scoring. If the guides pass these courses, they become eligible to guide big game hunts. Each hunter planning a trip to the reservation is given a list of program-sanctioned guides and information about their years of experience, number of hunts guided, success in getting trophy-winning game, etc. The hunters themselves then choose among these guides and register their choice with the W&ORD. This service contrasts with other tribal wildlife programs where hunters are offered a list of guides who have not necessarily been chosen, trained or approved by the tribal program, and the connection between hunter and guide is kept

⁴⁶ There is also a \$3,000 trophy fee if the bull is harvested.

outside the arena of the tribal hunting program. The W&ORD finds their approach to be an important aspect of their successful big-game hunts. Hunters who return year after year to the reservation typically choose the same guide. New hunters are offered their choice of a number of guides, all of whom are guaranteed to be competent. Guides who provide less than superior service may be chosen by fewer hunters, resulting in a kind of survival-of-the-fittest effect. Given the success of this strategy, it may be no surprise the director of the W&ORD has a degree in business as well as wildlife biology.

Because non-citizen hunting, fishing and other recreational opportunities are important programs within the W&ORD, the WMAT has been attentive to setting them up in a way that ensures their maximum legal foothold when disputes arise. The WMAT developed its fish and wildlife code to reflect due process and to mirror certain federal statutory prohibitions, so that should someone commit a major wildlife crime (for example, poach a black bear), a federal U.S. Attorney may more easily file an action in federal court to uphold the tribal code under the federal Lacey Act. Additionally, the fish and wildlife code includes an exclusion from reservation provision which enables tribal authorities to remove non-citizens from the reservation in accordance with certain civil due process procedures filed in the WMAT tribal court. This exclusion provision has come into play outside of purely fish and wildlife matters; for example, it has been invoked in trespass issues and other conduct by non-Indians which would be considered crimes under Federal or state law. (See for example, *Hardin v. White Mountain Apache Tribe* 1985). Thus, the Tribe's fish and wildlife code has served as an important tool for the tribe in retaining and affirming the tribe's inherent sovereignty to exercise legislative

and adjudicative authority over its tribal trust lands and natural resources. The Tribe reviews federal decisional law and ensures that its hunting, fishing and other recreation permits are written in such a way as to fall within the bounds of court decisions which uphold tribal sovereignty. For example, all tribal permits state that through the purchase of the permit, the individual purchaser is submitting to the jurisdiction of the Tribe and its courts; this is important given that the ruling in *Montana v. United States* (1981) and its progeny is being applied in an increasingly broad fashion to non-citizen activity within reservation trust land boundaries.⁴⁷

Despite the strengths of the fish and wildlife management programs, the W&ORD is not without its challenges. In addition to major barriers to achieving tribal sovereignty discussed elsewhere in this dissertation, the Tribe is currently facing extreme financial hardship, also felt in the management programs.⁴⁸ (On one of my trips to the WMAT, the reservation was abuzz about an economic crisis: there was talk of emergency budget cut meetings and of all employees taking a 10 to 25 percent salary cut; some employees did not even receive paychecks for that pay period. While the W&ORD is one of the primary sources of revenue for the Tribe (in addition to the casino, sawmill and other enterprises), the outdoor recreation department's enormous revenue goes into a general pot that is redistributed in accordance with the annual budget approved by the Tribal Council. This means that, particularly in a time of economic crisis, the W&ORD does not necessarily receive the funding it requests back from the Tribe for needed improvements, operation and maintenance. Ironically, while this management division is

⁴⁷ See discussion of *Montana v. U.S.* in Chapter One.

⁴⁸ For a message from the Chairman on this topic, see Lupe 2008.

the most lucrative one in this research, there are real needs within the programs, particularly for salary increases for the conservation officers, many of whom work overtime regularly and still rely on federal food stamps to make ends meet. The conservation officers here are among the poorest paid in Indian Country or elsewhere—despite department revenues which are among the highest of all tribal fish and wildlife programs.

Outcomes

Through these programs, the W&ORD has been able to achieve significant economic profitability. For example, there is a several-year-long waiting list for the \$17,000 trophy bull elk permits, and people from around the world continue to make inquiries regarding the program. The Tribe has developed a successful “Chairman’s Tag” for a trophy bull elk that was auctioned in recent years for between \$25,000 and \$75,000. Annually thousands of hunters, fishermen and vacationing families come to the reservation for top quality recreational opportunities, and they are willing to pay for it. In recent decades, W&ORD profits, along with forestry revenue, were the largest sources of program revenue for the Tribe, generating millions of dollars annually. Unfortunately, the catastrophic Rodeo-Chediski forest fire in 2002 destroyed about 275,000 acres of tribal land and resulted in the closing of the Cibecue sawmill on the west side of the reservation (see Shaffer 2004). The fire also caused the cancellation of 24 trophy bull elk hunts. Nevertheless, the W&ORD has been the only tribal program to consistently make a profit in the last 25 years. This is of no small importance: unemployment among reservation residents is estimated at 51 percent, and per capita income for reservation

residents is less than \$6,400—an income about half of the average in Indian Country overall and less than a third of the national average.⁴⁹

Furthermore, not only have the division's efforts been extremely successful and enormously important to the Tribe overall, there are also definite spin-off benefits for individual tribal citizens. The guiding system provides an opportunity for tribal citizens to develop skills and earn money. While about 10 guides also work for the W&ORD, 30 others do not; with high unemployment rates for the WMAT, guiding is a valuable opportunity to earn extra income. In addition, with growing markets for big game antlers, tribal hunters themselves can sell antlers to make a profit.

In addition to fiscal success, W&ORD has also improved sustainability of resources, the effects of which are evident. The WMAT land is known worldwide for its beauty and abundant natural resources, and the White Mountain Apache people take great pride in their homeland and healthy fish and wildlife populations. Often, economic development is perceived as contradictory to conservation and good environmental stewardship, but the WMAT has shown that these goals may be complementary. The director's perspective focuses on balance: "Concentrate the people there, they stay there and then they come out. They may fish on one of the streams. But we've developed a lot of really unique programs here that generate a lot of money and don't create a lot of activity—not a lot of sustained activity, long-term activity—that have done really well for the tribe." The tribal fish and game code clearly articulates conservative harvesting levels with careful monitoring, the fruits of which can be seen in a variety of ways. For

⁴⁹ BIA Labor Report 2003; Census 2000.

example, more Boone and Crockett record-book elk have been harvested on WMAT lands than on any other single land management area in the world. Meanwhile, the W&ORD, along with state and federal partners, has brought back the endangered Apache trout from near extinction. And the WMAT was the first tribe to officially become involved with the Mexican wolf's recovery.

Arguably the most important outcome of excellent management is the Tribe's ability to self-govern its people and resources. Through its proactive efforts, the WMAT has established itself as a leader in natural resource management and has won hard-fought battles for jurisdiction over citizens and non-citizens alike within exterior reservation boundaries.⁵⁰ The WMAT was involved in developing grant opportunities through the U.S. Fish and Wildlife Service for tribes ("Tribal Wildlife Grants" and "Tribal Landowner Incentive Grants"⁵¹) and in the legislation for the Conservation and Reinvestment Act (CARA).⁵² The Tribe's fish and wildlife code has served as a model to numerous other tribes, and individual staff members have offered their expertise to their professional counterparts elsewhere.

Not surprisingly, the WMAT and its Wildlife and Outdoor Recreation Division have been recognized extensively for their efforts, including awards from the Harvard Project on American Indian Economic Development, the President's Conference on Conservation Partnerships, the Rocky Mountain Elk Foundation, the St. Louis Tribal Delegation, and the State of Arizona, among others. The White Mountain Apache Tribe

⁵⁰ For a more involved discussion of regulatory and adjudicatory jurisdiction, see Chapter 2 of this dissertation.

⁵¹ The Tribal Landowner Incentive Grants are no longer available.

⁵² CARA is currently stalled in the legislature. It was passed in 2000-2001 with an overwhelming majority by the House, but the Senate has yet to vote on the Act.

was also the first American Indian nation to establish an explicit Statement of Relationship with the U.S. Fish and Wildlife Service (after which several other Arizona tribes followed suit) leading to Secretarial Order 3175, which makes explicit federal departments' responsibilities to Tribes in their management of trust resources. Building success on success, the WMAT has established itself as a leader across Indian Country and nationally in natural resource management and nation-building.

5. The San Carlos Apache Tribe

The San Carlos Apache Tribe manages significant fish and wildlife resources on its reservation. The Tribe does not manage fish and wildlife off-reservation.

Background to San Carlos Apache Management

The San Carlos Apache Tribe lives in east-central Arizona on the San Carlos Apache Reservation, first established by Executive Order in 1871 in a joint reservation with the White Mountain Apache. The reservation was separated along the Salt River by an Act of Congress in 1897. When copper and silver were discovered in the area, large portions of the reservation were re-appropriated by the federal government. In 1972, another Executive Order returned some of these lands and established the San Carlos Reservation at its present size of over 1.82 million acres, making it the largest Apache reservation. This land base, a small portion of the vast Apache homeland since around the 10th century, is quite diverse, ranging from low-lying desert plains to towering pine forests.

Like its diverse topography, the Tribe itself is also diverse, composed of members from many different Apache bands including the Aravaipas, Chiricahuas, Coyoteros, Mimbrenos, Mogollons, Pinalenos, San Carlos's, and Tontos (Tiller 2005). Approximately three-quarters of the nearly 12,700 tribal citizens live on the reservation, the population of which is virtually all American Indian (BIA Labor Force Report 2003; Census 2000). The Apache people of San Carlos traditionally have a great respect for the land, and Apache people are acknowledged even by their Native neighbors for having among the lightest footprints on the land. The traditional cultural system can be described as an ecocracy wherein society was governed by the natural world. The interdependent relationship between society and ecology was evident in the way people protected nature and in turn were sustained by its resources. However, a violent and tangled history of colonization and relations with the United States government severely disrupted the balance and harmony found in traditional Apache societies. Today the Apache Nation Chamber of Commerce describes the San Carlos Apache reservation as "the world's first concentration camp still existing to this day" (Apache Nation Chamber of Commerce 2008). The imposition and adoption of an IRA government in 1934 only perpetuated the breakdown of traditional political structures based in sub-tribal clans, seriously undermining tribal self-sufficiency. With political power taken away from the people, the people have sought power through alternative means.

In 1998 the San Carlos Apache Tribe (SCAT) experienced major political unrest that was characterized by demonstrations, protests, standoffs and takeovers, centering on

concern about tribal government accountability and an \$8.6 million Tribal budget deficit (Record 1999). A former council member described their experiences during this period:

They had what they call “a Call to Action” that was constantly fighting the council... We would be escorted by the police to certain meetings, and they would be waiting for us alongside the reservation line. So I usually would get called: “Don’t go back into the reservation. Stay out here until this evening.” So I would stay out there.

Although the unrest subsided, its roots still remain intact. The Tribe continues to struggle under a government structure that does not reflect traditional Apache concepts of authority or societal organization and does not provide for a clear separation of governmental powers. The Tribal Council members are tempted to favor divisions within the Tribe along clan and familial lines. At the individual level, the San Carlos Apache people continue to face many social and economic challenges. Fewer than 58 percent of reservation residents have a high school degree, a similar rate to the Yakama and the White Mountain Apache (Census 2000). However, among all cases in this study the SCAT has the highest unemployment rate at 81 percent, and the lowest per capita income at \$5,200 (BIA Labor Force 2003; Census 2000). These figures are not unrelated to other phenomena known to persist in economically depressed communities that also significantly affect the San Carlos Apache, including alcohol and drug abuse—particularly methamphetamines—depression, a high attempted suicide rate, and violent crime (see Kitcheyan 2006).

Yet the San Carlos Apaches have a lot to be proud of. In 2000 the SCAT was named an Honoring Nations Honoree by the Harvard Project on American Indian Economic Development for the work the Elders Cultural Advisory Council has

performed in relation to issues of tribal governance (see Harvard Project 2000). The Tribe's language retention rates are among the highest in Indian Country with 65.5 percent of adults speaking their Native language⁵³ (the average across all U.S. reservations is 3.9 percent) (Census 2000). The San Carlos Apache reservation is also an exceptionally beautiful place to live and visit, with abundant natural resources that enable the Tribe to provide world-renowned recreational opportunities.

San Carlos Lake, created from the Coolidge Dam, is the largest body of water in Arizona with 158 miles of shoreline when full. The lake attracts anglers and families from near and far for camping and recreation. Additionally, approximately one-third of the reservation is forest or woodlands—including the largest contiguous ponderosa pine stand in the world—making the San Carlos Reservation an ideal habitat for elk, mule deer, black bears, turkeys, and mountain lions, among other wildlife (ITCA 2008). Recognizing the value of these resources, as early as the 1950s, the Tribe required San Carlos Apache citizens to acquire hunting licenses and tags, and in the mid-1950s citizens were required to purchase these licenses and tags, a very early start in charging tribal citizens for these activities in comparison to other tribes. Beyond tagging and enforcement, natural resource management began formally for the Tribe in the 1970s, with a tribal ordinance for fish and game passed in 1976.

San Carlos Apache Fish and Wildlife Management Today

⁵³ These rates measure the percentage of people speaking their own language in their homes (see Census 2000, Summary File 3). They cannot guarantee fluency, but can be assumed to represent the amount of people who speak their language in their homes at least sometimes.

Natural resource management is housed in the Recreation and Wildlife Department, established around 1990, and encompasses three main programs: recreation and wildlife (including administration and a sales office), wildlife management, and conservation enforcement. With a staff of approximately 20 people, the department is tasked with a wide variety of responsibilities to maintain and increase both resource sustainability and economic revenue for the Tribe. In recent years, prioritizing has become essential as funding has dwindled, leaving the department to continually do more with less, a common story in Indian Country today.

On many fronts, the department has more than risen to the occasion. It is most famous for managing the public (non-citizen) hunting programs, which are enormously successful and world-renowned. In fact, at \$30,000 a piece, the San Carlos Apache trophy bull elk permits are the most expensive in the country currently—almost double the price of those with their WMAT neighbors to the north. Desert bighorn and Rocky Mountain bighorn sheep permits are \$75,000 and \$45,000 respectively. Unlike the WMAT trophy bull elk hunt, the SCAT permits do not provide an outfitted hunt; this price covers the animal only. Despite the formidable costs, in recent years, these tags have been sold out. The department staff attributes this interest to two things: the quality of the animals themselves (a world record-sized elk was harvested from the reservation in 1997), and department efforts at marketing their hunts.⁵⁴

⁵⁴ There is some controversy about the legality of the harvested elk, although the existence, size and location of kill are not in dispute. For some public commentary, see the Hunting Report 1997 and King's Outdoor World 2003.

In fact, marketing is the main responsibility of the sales and promotion person in the department—the only department in this study with such a position. While in other tribal management programs marketing tasks may be shared by various staff members (if marketing is done at all), at the SCAT department, the sales and promotion person travels to trade shows all over the country and exposes people to the opportunities offered by the San Carlos Apache; this staff member also coordinates radio and print advertisement, and in one promotional effort invited the Outdoor Channel to tag along on a big game hunt, providing worldwide coverage. A few years ago, the trophy elk permits cost \$25,000 and were not selling very well; the department decided to make a promotional video about its trophy elk program and since then has experienced an incredible response: “Because of that video, all of a sudden, we got people knocking on our doors, trying to break down our doors trying to get in here. They were actually fighting each other trying to get in to hunt these animals. And our clientele are billionaires.” In 2007 there were more than three times as many willing hunters as there were permits for the trophy bulls.

The popularity of the trophy hunts allows the department a lot of control over the hunters. Because the demand is so high, the department can be selective about whom it sells a permit to, inviting the kind of hunter they would like to have. The Tribe wants a hunter who is ethical and respectful, someone who will, for example, accept their loss if they shoot an animal that turns out to be smaller than they would like. An unethical hunter might leave that animal and look to use their tag on a larger one. These kinds of wastes are a loss to the following year’s trophy population. In the past, an occasional hunter new to SCAT might engage in these practices considered unethical by the Tribe.

In such situations, the hunter was politely informed that he would not be receiving a permit the following year due to his hunting ethics. A recent situation involved a hunter who argued he could fight a dispute with the department in court and was furthermore “vulgar” towards a conservation officer; in return the director told the hunter he had missed the opportunity to show respect as a guest of the Tribe. The department staff feels that word has passed efficiently amongst big game hunters worldwide regarding SCAT ethical standards, and as a result, they now rarely experience breaches of conduct on the part of hunters. The department has gained significant control over the non-citizen hunting experience.⁵⁵

Other big game hunts outside of trophy hunting are also very popular. Big game permits are sold only at the Recreation & Wildlife office but are also occasionally auctioned off at various conventions and trade shows (such as at the Rocky Mountain Annual Elk Camp, Safari Club International National Convention, and National Rifle Association fundraising events). Non-citizens can come to the department offices in Peridot, Arizona (usually on a predetermined day when the permits go on sale) to purchase hunting permits in person on a first come, first served basis. After opening sale day, the hunters may send in their application for the desired hunt and if any are left, a permit or tag will be saved for them until it has been paid for. Due to the in-person advantage and the popularity of these hunts as well, the opening day for permit sales has become something of a phenomenon: often hunters are lined up and camped outside the

⁵⁵ As is the case for many tribal public hunting programs, guides are required for many of the big game hunts. However, the SCAT operates its guiding system with a much less hands-on approach than does the WMAT. With the SCAT the department provides a list of tribally licensed guides and their contact information to interested hunters, but the hunters choose and arrange the guides themselves.

office doors for two to three days before sales open. It is not uncommon for fights to break-out for disputed places in line. When I asked the director what made his department successful, he said, “I don’t think we’re doing anything different than most businesses. We’re looking for customers like everybody else would.” After having talked to many staff at other tribal programs who dreamed about having a hunting program like San Carlos’s, I responded, “But you’re doing that well, and that’s not typical.” He said, “I think we’re just doing it, that’s the difference. In the past, no one made the effort to do that. They just kind of followed what had been done before... And [it was] just kind of the same thing year after year. All I did was I planted the basic principles of business management, that’s all. And it’s working.”

Although the department is certainly focused on creating revenue—and not surprisingly, given the current tribal economic challenges—there is also an explicit interest in self-governance and the exercise of tribal sovereignty in the way they do business. One staff member made this clear:

I don’t know if you’ve seen the history of the reservation but it used to be bigger. Miami and Superior used to be part of the reservation. Morenci and Clifton used to be part of the reservation. Winkelman down south used to be part of the reservation. They just made it smaller and smaller. So it’s important for us to build up our departments so the federal government can say the Tribe can handle their own. A bigger land base—it’s very important that we do that. It’s always in back of our mind here to protect.

This same sentiment is reflected in the director’s comment, “They need to develop the programs so the federal government won’t come and say, ‘Okay, you have to do it, or we’ll do it.’ Tribes develop their own program and the federal government will stay out of the way.”

The SCAT opposes reintroduction of the Mexican gray wolf spearheaded by the U.S. Fish and Wildlife Service. While the White Mountain Apache Tribe has signed a memo of understanding with the federal agency on this project, the San Carlos Apache have resisted pressure and have entered into a cooperative agreement with the USFWS for wolf removal from the San Carlos reservation. (The Tribe is currently battling the federal government in regards to the government's proposed delisting of the bald eagle from the threatened and endangered species list.) Unlike most other tribal fish and wildlife departments, the San Carlos Apache staff reported collegial relations with county governments (the reservation lies within three counties) and state government. That the San Carlos Apache Tribe offers enforcement help in these other jurisdictions speaks to the independence and credibility of the tribal recreation and wildlife department.

Tribal citizens always have preference for hunting and fishing activities. Although Tribal citizens do buy hunting licenses and permits, if harvest levels of a particular species need to be lowered, the cut comes from the number of non-citizen permits available before they affect tribal citizen limits. Fishing is also regulated, and in 2008 the Tribe began charging citizens for fishing licenses. This change supports conservation efforts and has been understood and accepted by tribal citizens as necessary.

Regulations, including season dates, harvest levels and number of permits, are recommended by the department staff to the tribal Wildlife and Recreation Commission. The public is informed of the department's recommendations, and the commission holds public meetings to gain input. The commission is responsible to the tribal council, which oversees the larger decision-making related particularly to government-to-government

agreements, budgets, major expenditures. The commission has final authority on other matters such as long-term management plans, setting season dates and harvest levels, and departmental operations including salary settings. However, overlap between the council and commission is possible, as in 2007 when four of the five positions on the Wildlife and Recreation Commission were held by current council members. This overlap allows commission members who are also council members to vote twice on the biggest decisions. Those who are council members as well as commissioners state that they wear two hats and have to make their decisions according to which hat they wear at the time a decision is made. Under political pressures common across Indian County, the commissioners are often tempted to pay more attention to their constituents than to the departmental recommendations. In such a situation, the double-vote is particularly problematic for resource management.

Another challenge for the department is the continual decrease in federal funding, a reoccurring theme in Indian Country. Wildlife management with the SCAT is funded through a 638 contract with the BIA, but lately, this money barely covers salaries alone. Although department revenue is very large for a tribal program, recreation and wildlife program revenue goes into a general tribal fund; the department must request funds back from this fund to operate its programs and often it does not receive what it requests or requires, in part because other tribal programs are in more dire need of assistance.⁵⁶ A few years ago, the department employed three biologists, the minimum necessary to

⁵⁶ This could be a disincentive for program staff to operate efficient and effective programs. Although recreation and wildlife staff discussed the frustration regarding their program revenue supporting other tribal programs that are not running as well, there was no indication this deterred them from their usual dedication, as the recreation and wildlife program revenue continues to remain very high.

adequately address department responsibilities. Two of the biologists left the Tribe for personal reasons and, due to budget cuts, they were never replaced. Consequently the remaining biologist—originally a fish biologist—willingly agreed to redevelop the whole program and ambitiously took over the duties of all three positions. When I first visited San Carlos, this biologist was handling everything from big game hunts to fish stocking to wildlife surveys, with two technicians in tow. Unfortunately, she has also left the department and, owing to new economic challenges within the Tribe, her position remains unfilled.⁵⁷ Still, the demands to meet federal mandates are not decreasing, and the challenge of defending self-governance with minimal funding looms large:

The pressure the federal government has put on tribes throughout their own programs, for instance fish management programs...or certain endangered species... It's put a lot of pressure on our department to develop those programs and if we don't have the staff, it's very difficult to do. When the federal government is pulling back funds and doesn't support the program, it really hurts us. It's kind of like, all right, what are we supposed to do?

Tribes all over the western United States became alarmed when the federal government shut down the federally owned and operated fish hatchery on the Mescalero Apache reservation. This particular hatchery provided fish to several tribes in New Mexico. With the hatchery closed, the U.S. Fish and Wildlife Service no longer stocked tribal waters and the New Mexico tribes lost revenue. The San Carlos Apache and other Arizona tribes receive fish from the Fish and Wildlife Service hatchery located on the White Mountain Apache reservation. The federal government had planned to close that hatchery as well, but changed course and at present still provides fish for the San Carlos Apache and other Arizona tribes. In response to the closing of the Mescalero hatchery

⁵⁷ A temporary biologist was hired for one month during this period.

and the threat of more federal hatcheries closing, 16 southwestern tribes organized and established the Southwest Tribal Fisheries Commission to lobby in Washington to keep the fisheries open. Thus far, their efforts have been successful in fending off hatchery closure, but tribes remain uneasy as federal interests seem to focus increasingly on threatened and endangered species rather than assisting tribes in stocking.⁵⁸

Nevertheless, although federal money is tight, money management itself has improved within the department. Unique among this study's cases, the SCAT Recreation and Wildlife Department has a dedicated tribal citizen accountant who monitors multiple budgets for the department, and who has helped organizational matters tremendously. In fact, when she first began the job, she found checks worth multiple thousands of dollars that had never been deposited. The director credits her work with being the most important aspect of money management for the department. Although all program revenue heads to the tribal finance department, with their own accountant the Recreation and Wildlife Department at least has a very clear and immediate understanding of its financial position.

Another strength of the department is its well-respected group of conservation officers. The chief and eight game wardens are all cross-deputized with the State of Arizona and the BIA so they "can go help other people on different reservations," and they are occasionally called to do so (G-30004). They also assist the tribal police department and can conduct investigations on Arizona State jurisdiction. On their own reservation, the officers handle not only fish and wildlife issues, but also everything else

⁵⁸ The Mescalero Apache Tribe ended up taking over the former FWS fishery, but the tribe is struggling to fund the operation.

imaginable including traffic violations, trespasses, search and rescue and murder. Pitching in when short on staff, as the wildlife management program often is recently, the officers also occasionally do biological surveys. (This kind of variation in responsibilities reflects the activities of the conservation officers at the Crow Tribe as well.) Although the game warden division is approximately half the size it has been previously, there is no shortage of dedication amongst the wardens. Notably, late night calls to the dispatchers are routed to the Chief Game Warden who either responds himself or gets the on-call ranger to respond. By 2007 the chief had been in SCAT law enforcement for 33 years.

Outcomes

By virtue of the dedication of the staff and the leadership of the director, the San Carlos Apache Recreation and Wildlife Department has the largest proportion of revenue relative to expenditures of any SCAT program (including the casino).⁵⁹ While revenue is almost always a good thing, for the economically depressed communities of the San Carlos Apache, this revenue is particularly significant. Big game hunts also offer income to tribal citizens who serve as guides. Currently, about 30 guides benefit at least occasionally from the guide requirement for public trophy hunting and the Recreation and Wildlife department itself sends over a million dollars annually to the tribal general fund.

Notwithstanding the large potential for revenue and the tribal economic needs, the department also attempts to be attentive to the health of the fish and wildlife resources.

⁵⁹ Although the casino earns more gross revenue than the Recreation and Wildlife Department, the department spends significantly less in expenditures and consequently takes in a higher proportion of revenue.

Consequently, the department carefully limits the number of trophy and other big game permits offered each year. Unfortunately, biological management of the fish and wildlife will be limited while no biologists are on staff. At present there is virtually no collection and analysis of biological information, and the previous biologist was stretched too thin, attempting to fill the position of three biologists. Over time this could directly affect the health of the resources, in turn potentially decreasing the incoming revenue from the program and the fish and wildlife for tribal citizen use.

Despite the absence of tribal biologists, the department nevertheless highly values its employees, making explicit efforts to support employees' human capital and professional development. One staff member said, "One thing they try to encourage here is to put a lot of money into training so they can take some training in any field they need, each employee, so it's not limited to anyone. Everybody has opportunity to get training to improve themselves." Likewise the chief game warden encourages continuing training for the law enforcement officers. A significant training budget for the Recreation and Wildlife Department supports these activities.

Lastly concerns about self-governance drive recreation and wildlife program management. The department's ability to control who hunts and to choose hunters who match cultural norms of good hunting ethics is a sure sign of programmatic success—they are beyond the desperate position that would encourage them to accept anyone who has the money to offer. Furthermore, in contrast to extreme interference by the federal government in other tribal matters at San Carlos, the recreation and wildlife department has been able to uphold tribal priorities through the operation of its own programs. BIA

influence on fish and wildlife management is limited to 638 contracts, and the U.S. Fish and Wildlife Service is involved only in a supportive role assisting with fishery resources in stocking reservation fish. As testament to their governance abilities, the San Carlos Apache conservation officers provide enforcement services off the reservation as well.

While significant challenges remain—particularly in regards to biological management, the SCAT Recreation and Wildlife Department has thus far been able to effectively manage their resources in a way that develops revenue, jobs and human capital, all the while maintaining their sovereignty in face of potential outsider interference.

6. Red Lake Band of Chippewa⁶⁰

The Red Lake Band manages significant fish and wildlife resources on-reservation. Although the focus is on on-reservation management, the Band also manages fish and wildlife resources in its ceded territory.

Background to Red Lake Fish and Wildlife Management

The Chippewa, or Ojibwe, were one of the largest tribes north of present-day Mexico (Tiller 2005). The Chippewa people had a vast homeland across the Great Lakes from New York to North Dakota, but were pushed westward by the Iroquois in the mid-seventeenth century, in turn forcing the Sioux to move further west to the Great Plains. The Red Lake Band of Chippewa is a group of members from seven different Chippewa bands who settled in Minnesota. In treaties and agreements in 1863, 1889, and 1902, the

⁶⁰ Portions of this section are taken from Dolan and Record (forthcoming).

Red Lake Band ceded 14 million acres of what is now northwest Minnesota to the United States, while at the same retaining ownership 807,000 acres for their reservation. Unlike other treaty tribes in this study who ceded land and reserved hunting and fishing rights on that land, the Red Lake Band agreements did not specifically include reserved hunting and fishing rights in the lands ceded. Profits from the sale of lands ceded by the Band were to be deposited into a trust for the Band. This money never made its way to the trust and investigations into the scandal continued well into the 20th century (Tiller 2005).

Despite this cession, the Red Lake chiefs rejected the allotment (under the Dawes and Nelson Allotment Acts) of the land which the Band retained under the agreement of 1889 on the grounds that preserving the Band's lands and waters for Red Lake's exclusive, communal use was paramount to the survival of the people and their culture (Meyer 1992).⁶¹ Individual ownership of land was a concept utterly foreign to the Red Lake people. For centuries, the Red Lake Band depended on its namesake lake for its cultural lifeblood. Considering it a sacred gift from their creator, the people also relied on the lake and its plentiful array of fish, notably the prized walleye, as their main source of nourishment, referring to it as their "food store" or "food warehouse" (Haga 2006). In rejecting allotment, the Red Lake chiefs believed they were reserving the entirety of Red Lake for the exclusive use by their people, but the State of Minnesota subsequently appropriated the easternmost portion of the lake's upper half, a development which has been a source of legal and political tension for the past century. Nevertheless their

⁶¹ The Nelson Act supported federal policy aimed at assimilating Minnesota Chippewa Tribes to mainstream American culture by establishing reservation boundaries and allotting land within those boundaries to individual Indians. Its purpose was to establish private property and to convert Indians into farmers (Meyer 1992).

decision resulted in the Red Lake Band's land base becoming one of two "closed" reservations in the United States.⁶² Having witnessed the effects of allotment on neighboring reservations such as White Earth, the Red Lake leaders viewed this policy as a veiled attempt to strip Native nations of their lands and weaken their societal ties (Meyer 1992). Adamant about maintaining their community, culture and homeland, this position has remained the political stance of the Red Lake Nation well past the following century. Consequently, as a closed reservation, the Red Lake Band controls virtually all land within the reservation boundaries and has never been subject to state law.⁶³ This accords the Band virtually unfettered jurisdiction over its lands and waters, notably the 83 percent that it controls of Red Lake, the largest freshwater lake in the U.S. outside of the Great Lakes. More than half of the Red Lake reservation is made up of wetlands, and nearly all of the land is pristine and rural. Very little of the land has been touched by development or agriculture and much looks just as it did two hundred years ago.⁶⁴

Subsistence fishing on Red Lake was historically considered an honorable living and a family affair, endowing Band citizens with a sense of purpose and relatives with an opportunity to bond with one another. Often in the summer, families set up fish camps and lived alongside the lake for several months. Each family member contributed to the walleye harvesting process, with men and older children setting and pulling nets, and women and younger children removing the fish and drying the nets. For the young, it provided an irreplaceable sense of identity and responsibility, teaching commitment,

⁶² Red Lake and the Warm Springs Tribe are the only treaty tribes whose reservation lands were not allotted and excesses sold to non-Indians.

⁶³ There are a few acres in the Redby area owned by non-citizens.

⁶⁴ Most deer on the reservation have never seen a human, and consequently respond differently to hunters and others who approach them than deer do in other areas of the country.

independence, reliability and the value of hard work that would be carried into their later years. Although the work was hard, the people were grateful for the fish, offering ceremonial tobacco to the lake in thanks. Fishing was a way of life for the Red Lake people.

During World War I, regional food shortages and the high cost of meat prompted the State of Minnesota to open several large bodies of water to commercial fishing, to be supervised by the State's Game and Fish Commissioner. In an agreement with the U.S. Department of the Interior, the State of Minnesota developed a plan for commercial fishing on Red Lake that, in part, allocated "certain benefits" to the Red Lake Band (Avery 1918:58). In exchange for the Band's permission to allow commercial fishing on the lake, the State offered to help the Band plan, set up and run the fishery. Under the State, management of Red Lake was based mainly on meeting the needs of the hungry public and not on any scientific understanding of sustainability. From 1920 to 1928, along with State fishing crews, Red Lake Band citizens brought their catches to the State, which then sold the fish wholesale to eastern and mid-western markets (Meyer 1992). However, the Red Lake Band was unhappy with the arrangement. In 1922, Band leaders objected to the State-run operations, passing a resolution which asserted that the State's fishing crews and marketing approach disadvantaged Red Lake fishermen, that the State inaccurately weighed the fish and that the State underpaid the Red Lake Band fishermen relative to market prices. In addition, the Band felt that the State was effectively wasting Red Lake resources by refusing to sell "rough fish," those fish caught in nets which were less desirable for the table (Van Oosten and Deason 1957; Meyer 1992; Walter Butler

Company 1978). The Superintendent of the Red Lake Agency conducted an investigation which confirmed the State underpaid the Red Lake Band fishermen in relation to the prices paid by private companies to non-Band citizens. The Superintendent also appointed someone to check the fish weighing. The State also began processing and selling rough fish, but controversy between the State and the Band continued (Van Oosten and Deason 1957). Nevertheless, crews of both Band and State fishermen utilized the fishery, and were able to provide food to Minnesotans and others at affordable prices throughout the war years. When the war came to an end, all State-run fisheries were closed except for Red Lake, as it was determined to be a good economic resource for the Band and offered the first form of steady employment on the reservation.

In 1927, a fish wholesaler from southern Minnesota complained the State was competing with his business. This instigated a summons that resulted in the Minnesota Supreme Court ordering a restraint on the State in 1929, claiming the State no longer had the right to conduct business in the commercial fishing industry. The State legislature transferred the fishing operations on Red Lake to the Secretary of the Interior. The Secretary in turn established a regulatory framework for the Red Lake commercial fishing industry, making it the only Indian commercial fishery regulated by the Secretary and codified in law.⁶⁵ Under these regulations, the Secretary was responsible to manage the fishery on behalf of the Red Lake Band. Although the code of federal regulations called for science-based management, in practice a static, non-scientific harvest quota for

⁶⁵ Although the regulation still officially falls under the Secretary of the Interior, in 2006 the Red Lake Tribal Council passed a resolution stating it opposes the Secretary's regulation "because it could hinder the Red Lake Band's desire to promulgate its own regulations."

walleye was used that both ignored the lake's health and failed to provide proper regulation. In addition, no systematic assessments of the harvests took place. With few exceptions, the Red Lake Tribal Council had no say in management decisions. As Pat Brown, fisheries biologist for the Red Lake Band, stated, "There was a regulatory scenario the Secretary put in place in 1930 and forgot about." At the same time, the Red Lake Fisheries Association (RLFA), a co-op established by the Band's commercial fishermen, failed to control the number of Red Lake citizens setting gillnets on Red Lake or the number of nets those citizens set each morning. The organization also routinely asked the Secretary's representative, the BIA, for quota extensions, which were always granted regardless of the lake's walleye population at the time (Haga 2006). In fact, although useful biological data on Red Lake was being generated by the Band and the University of Minnesota, BIA decisions failed to take this data into account.⁶⁶

Meanwhile, on the lake's state-controlled waters, scores of non-Indian anglers regularly exceeded their daily catch limits of walleye. Not only were the numbers of enforcement officers on both sides inadequate, but communication between them was very rare. All told, lack of enforcement by and communication between the managers of both sides of Red Lake—combined with a lack of assessment of the amount of fish leaving the lake—sometimes encouraged rampant overfishing.

The lack of enforcement also fueled a flourishing black market from which both Indians and non-Indians benefited. Band citizens trying to make a living in a depressed reservation economy could sell fish for quick cash to people passing through the

⁶⁶ In fact, Lloyd Smith noted variability in the walleye productive capacity by the late 1940s.

reservation. Non-Indians, for their part, fueled the demand. Some Band citizens sold walleye out of car trunks in the Twin Cities and to bars and restaurants throughout the Midwest (Niskanen 2006b). Sales outside of the commercial fishery were so common that non-Indians could purchase walleye at Vikings game tailgates and in school parking lots after principals made loudspeaker announcements (Anderson 2006). Systems of trading and bartering goods have been part of the relations between Band citizens and nearby communities for centuries. Some Red Lake Band families have traded fish or deer for beef or a bushel of corn, for example, with non-Band families for generations. Nevertheless, the unregulated market reportedly at times doubled the annual legal take of walleye, which was already well above sustainable harvest levels (Gunderson 1998).

Red Lake's walleye population began to experience boom-and-bust cycles in the 1970s and 1980s. This was the first evidence that the lake was being overfished. Fishing effort nearly doubled during this period, from an average of 200 fishers in the 1940s, 1950s, and 1960s, to an average of 400 fishers by the mid-1970s and 1980s. As walleye prices continued to rise, more and more Red Lake citizens were lured into commercial fishing in search of a good living. The RLFA, which supplemented its members' income with large season-ending bonuses, saw its membership surge from an already high 400 members to more than 700 by the early 1990s and its documented annual harvest top out at 950,000 pounds – eclipsing the static quota and far exceeding the lake's capacity (Niskanen 2006a). As Charles Barrett, Red Lake fisheries plant manager put it, “Everybody wanted to get in on it.”⁶⁷ By 1996, however, RLFA processed a meager

⁶⁷ Red Lake DNR and Project Preserve 2008.

15,000 pounds, one of a growing number of signs that the Red Lake walleye had been fished to the brink of extinction.

It was during this period that researchers from the University of Minnesota helped the Red Lake Band begin its natural resource department. In 1987, the fishery assessment unit was initiated and this formalized the process of gathering and analyzing data about the health of fish on the reservation, particularly in Red Lake. (Wildlife management was to follow a decade later, as is discussed below.) It was discovered that the walleye population had been variable since at least the 1940s.

Setting Up For Change

Witnessing firsthand the stark decline of the walleye and recognizing that a vital cultural and economic resource was slipping away, perhaps for good, the RLFA—by this time composed largely of second- and third-generation commercial fishermen who were also citizens of the nation—took action. In 1997 the RLFA, with the support of an overwhelming majority of its members, voted to discontinue all commercial gillnet fishing on Red Lake for the upcoming season. This act not only deprived the Red Lake fishermen—by their own choice—of their livelihood, but it essentially disbanded the largest social organization for Red Lake citizens and shut down the longest-running commercial fishery in the U.S.—in an effort to save the walleye before it was too late. About 100 families had been depending on walleye revenue at the time of the vote. However, many fishermen stopped fishing on their own prior to the RLFA decision, sensing something terribly wrong with the fishery as more effort was required to produce fewer fish. With their main source of income now gone, Red Lake commercial fishermen

were forced to look elsewhere to make a living, typically selling their boats and gear to help pay the bills. Some found work in construction or took jobs in the Band's casinos. Others unable to find regular employment on the impoverished reservation harvested maple syrup, filled in as substitute staff in the school system, and did odd jobs to make ends meet.

Just prior to this, then-Red Lake Chairman Bobby Whitefeather—recognizing that rehabilitating the walleye required the State of Minnesota's cooperation—initiated a dialogue in early 1997 with the State's Department of Natural Resources. Demonstrating that it was serious about walleye recovery, the Red Lake Band Council passed a resolution in 1998 placing a complete moratorium on walleye fishing, effectively ending all walleye fishing on Band waters. The State responded within the year by lowering its catch limits to two walleyes for anglers fishing on its portion of Red Lake, but it took the State another year through another legislative session to follow suit with a moratorium.

It was also during this time period that the Red Lake Band negotiated a Self-Governance agreement with the U.S. Department of the Interior in accordance with the 1988 and 1994 amendments to the 1975 Indian Self-Determination and Education Assistance Act. In 1997 as a "Self-Governance Tribe" the Band began taking over administration of its programs from the BIA. This shift meant the Band was able to make management decisions for itself free of the bureaucracy typical of BIA operations. According to Dave Conner, administrative officer of the Red Lake DNR, "One of the reasons Self-Governance works is that we can make decisions faster." With the natural resource programs now under direct control of the Band, decision-making was

streamlined and the Band was able to act quickly on those decisions, particularly in regard to the fishery, one of the first major governmental projects as a Self-Governance tribe.

A series of discussions began between the Band chairman, the State DNR commissioner and their staffs. These early meetings happened in cafes and restaurants at neutral points removed from either government. There was some tension between the parties in the beginning, but early on in the meetings individuals expressed their sensitivity to blaming. The group openly talked about their shared goals, and made an explicit decision to leave behind any blame, which would only inhibit the work of achieving those goals.

Eventually these discussions culminated in 1999 with the forging of a formal historic partnership between the Red Lake Band and the State of Minnesota, highlighted by the parties' signing an intergovernmental memorandum of understanding (MOU), a first in the history of tribal-state relations in Minnesota.⁶⁸ Among other things, the MOU reaffirmed the Band's walleye ban, prohibited walleye fishing on Red Lake's state waters, and mandated strict regulation of the moratorium on both sides of the lake. Renewable by the parties after ten years, the MOU also established a multi-partner technical committee—composed of scientists and other representatives from the Red Lake Department of Natural Resources (DNR), RLFA, Minnesota Department of Natural Resources, University of Minnesota, BIA, and U.S. Fish and Wildlife Service—and

⁶⁸ The BIA also signed the MOU.

charged it with devising and managing the walleye recovery effort and ensuring its long-term sustainability.

Recognizing that there was more than enough blame to go around regarding the walleye's collapse, the technical committee instead resolved to work together to identify and implement a solution. Bill May, former RLFA officer and technical committee member said, "I really listened to what the guys had to say and everything they said made a lot of sense to me...the biologists were using all their techniques to develop a plan. And what I liked about it is nobody in the group was there to say, 'It's because of you guys.' Never did that attitude come out. It was just this group of people saying, 'What can we do together?'" (quoted in Dokken 2000:16). Some of the press, however, had a field day playing the blaming game. Some negative press accounts pointed fingers at the Band and made it particularly difficult for the committee's Red Lake members not to bring those sentiments to committee meetings. Yet, says Dave Conner, "At the table, everyone took the stand that pointing fingers was not the purpose of this committee. By and large the committee didn't want it to be an issue and all the committee members were of that mindset. We attempted to make it an issue that didn't color the activities of the committee. That's not to say there weren't occasional tribe versus state disagreements." Dr. George Spangler, University of Minnesota fisheries professor and Red Lake technical committee member, recalled the rampant rumor mill, the press's role in fueling it, and the resolve of the technical committee not "to get involved in any of that stuff. All we wanted to do was assess the condition as it existed in the middle 1990s and do whatever

we thought we could do to bring [the walleye fishery] back as quickly as possible to a non-threatened status.”

Adopting governing principles of mutual respect, shared science and consensus decision-making, the committee launched an unprecedented recovery plan designed to bring the walleye back to Red Lake. This aggressive plan incorporated massive fry stockings, stringent enforcement of the fishing ban, public education, and comprehensive data collection to assess the quantity, maturity, diversity and natural reproduction capability of the walleye population as it recovered (Rivers 2006). In a testament to the spirit of their cooperation, the Band and the State agreed to share the cost of the restoration.

Red Lake Natural Resource Management

Fisheries management for the Red Lake Band falls under the Red Lake DNR and is spearheaded by one fisheries biologist and a handful of fish technicians, overseen by the DNR director and administrative officer. The same natural resource managers led the walleye recovery effort from collapse through moratorium to recovery, which endowed the effort with continuity and strengthened trust between the managers. Effective communication and trust between technical committee members also enabled each side to communicate with their respective publics, minimizing rumors and maximizing understanding. The DNR staff and the Red Lake Band’s elected leadership also systematically and conscientiously communicated with the Band’s citizens each step of the way. As Pat Brown, the Red Lake fisheries biologist put it, “Bringing the walleye back was the easy part. The hard part was managing the people.” On both sides of the

lake, citizen engagement was absolutely critical to the project's success, and without it, there would be no hope for the recovery. Throughout the recovery process, the Red Lake DNR staff and Band leaders held community forums and town hall meetings to inform Band citizens of the technical committee's recommendations and to get Band citizen feedback along the way. They also traveled to metropolitan areas in Minnesota to communicate with Red Lake citizens who reside off-reservation. The seven hereditary chiefs as well as tribal council district representatives were local points of contact for tribal citizens. Tribal council meeting minutes were published and widely distributed, and recovery efforts were detailed in the tribal newsletter mailed to all citizens. This kind of transparency in the Band government operations related to the recovery was essential to maintaining Band citizen trust throughout the process and helped maintain overwhelming citizen support of the recovery efforts.

Evidence of tribal citizen commitment to the recovery can be found in the significant fact that although illegal netting was anticipated—due particularly to the ban on subsistence fishing—during the moratorium the Red Lake DNR documented only one gillnet violation by a Red Lake citizen between 1997 and 2006. This represents a level of civic compliance virtually never achieved in fisheries management and speaks to the importance of the walleye to the people as well as to the ability of the managers, fishermen and tribal leaders to communicate with each other and with the Band citizens in general the importance of these efforts.

A number of fisheries biologists doubted the Red Lake effort could succeed given the lake's immense size and jurisdictional complexity, not to mention the failure of other

walleye recovery projects, even on lakes that had prohibited fishing for 20 years (Anderson 2006). Even some members of the technical committee were skeptical that recovery efforts would be successful. Others estimated the recovery effort would take at least ten years to return the Red Lake walleye to a naturally reproducing, self-sustaining level. However, the moratorium on fishing combined with massive fry stockings, stringent enforcement, public education, and data collection turned out to be more successful than anyone had imagined, exceeding even the most optimistic expectations. Rebounding from an estimated all-time low of roughly 100,000 fish in the late 1990s, the walleye in Red Lake numbered a robust 7.5 million in 2006 and boasted several strong year classes (Niskanen 2006a). The lake's walleye population is now able to rely fully on natural reproduction to sustain itself, the clearest sign of the renewed health of the species.⁶⁹ According to several members of the technical committee, the revitalization of the walleye is among the most successful inland fishery recoveries ever undertaken in North America (Robertson 2006). The walleye's resurgence prompted the Band and the State—with the technical committee's endorsement—to reopen Red Lake to subsistence and sport fishing in the spring of 2006, well ahead of schedule.

In late 2007, the Band re-established the commercial fishery on Red Lake. Both the Band government and citizens have resolved to insure that the walleye can sustain itself and the people's subsistence and cultural needs before considering its economic development; therefore, the decision to reopen the commercial fishery emerged only after serious deliberation and the assurance that the fishery's health was well on its way to

⁶⁹ Crappie populations, having exploded during the walleye collapse, are now declining. See Anderson 2006.

complete recovery. With two \$1 million grants from the Shakopee Mdewakanton Sioux Community, the Red Lake Band was able to restore its fish processing plant into one of the most technologically advanced in the country, inviting tribal citizens to make use of the opportunity immediately. Prior to the collapse, processed fish were sold to off-reservation wholesalers. With the fishery re-established, the Red Lake Band has a different approach. Essentially cutting out the middle man, the Band now sells fish directly over the counter on the Red Lake Reservation (Robertson 2008). Additionally the Band markets, sells and ships fish all over the country through Red Lake Nation Foods, a tribal enterprise developed during the moratorium to market other traditional foods in the absence of the walleye. Overseeing the process from catch to sale has enabled the Band to have more control over the market and reap greater rewards such as revenue and jobs along the way. The Red Lake fishery is the only commercial walleye fishery and one of the largest freshwater commercial fisheries in the country (Shakopee Nation 2008).

Many Band citizens are again able to financially support themselves and their families through fishing. With the new commercial fishery open, fishermen may work nearly the entire year. For the many tribal citizens who are seasonal employees working in construction or fire fighting, the winter ice fishing season provides complementary work. Although in the past gillnet fishing enabled serious fishermen to catch hundreds of fish at a time, only hook-and-line fishing is legal under the new regulations. The Red Lake Band is offering low-interest loans to Band citizens interested in investing in new boats or other fishing gear that might have been sold off during the early days of the

moratorium. However, hook-and-line fishing requires minimal gear and expertise; while this harvest method means that walleye must be caught one fish at a time, it makes commercial fishing accessible to virtually anyone interested. It also makes Red Lake one of the only hook-and-line commercial fisheries in the country (Robertson 2008). Now grandmas and their grandchildren can be seen spending an afternoon together on the edge of the lake. Citizens who in the past could not invest the time or money in gillnet fishing can now drop a line in the lake after their other workday has ended. Teenagers get together with friends on the weekends to make a few extra dollars. The wealth of the lake is now spread more evenly across all tribal citizens interested in participating and one may fish part-time for supplemental income. For example, one father fished all winter and was able to pay for his daughter's braces, something he would not have been able to otherwise afford.

By the end of 2007 over 900 Band citizens were registered to fish commercially with a daily catch limit of 75 walleye each. With the plant paying \$1.75 per pound, on a good day a fisherman may earn up to about \$175. Around 40 fishermen are fishing full-time, making significant income in the first two to three month fishing period. About 275 fishermen are supplementing their income by fishing part time, perhaps on weekends. The rest of the fishermen are on the lake when the fishing is good, taking advantage of the opportunity to earn a little income for minimal effort. All together, these fishermen harvested about 54% of the allowable quota, leaving significant room for greater numbers of fishermen. Additionally between 40 and 45 Band citizens are working in the processing plant cleaning, filleting and packaging the fish for sale. Many of the plant

workers are young people, with this being their first job. Sean Rock, the plant manager, has witnessed new self-confidence in plant workers as, for example, when a young person gets a paycheck after a few years of not working and is able to buy a car or take their girlfriend out on dates. These effects are significant, particularly with annual household income on the reservation in 2000 at just less than \$23,000 and BIA estimates of unemployment were at 60% (Census 2000; BIA 2003). As the Band citizens harvest more fish, the number of employees could grow substantially through a second shift or expanded plant in the future.

The recovery process and resulting success have drawn significant, even nationwide attention to Red Lake's walleye resources as well as to the regulation of those resources. The technical committee's sustainable harvest plan and authority to manage the harvest—along with the Red Lake Band's claim to 83 percent of the harvest quota, its 83 percent ownership of the lake, and its decision to continue to exclude non-Band anglers from fishing tribal waters—sparked vehement challenges from several directions.⁷⁰ Non-Indian anglers previously uninterested in the tribal portion of Red Lake have questioned the Band's ownership of the lake and the lake bed in an effort to fish and guide on those waters. Aggressive editorials and letters to the editor in Minnesota newspapers flourished, questioning tribal sovereignty, ownership and jurisdiction and suggesting opening up the reservation, placing a border patrol at the edges of the reservation requiring tribal citizens to obtain a visa to leave the reservation and so on.

⁷⁰ Red Lakers have higher bag limits than do state fishermen. This is a matter of jurisdiction—the Red Lake Band has the authority to set limits for its members on its portion of Red Lake, and the State of Minnesota has jurisdiction for state fishermen on the state controlled part of the lake. Furthermore, there are many more state fishermen than there are Red Lake fishermen, naturally enabling each Red Lake member a higher allocation than each state fisherman.

Two candidates for state and federal offices campaigned on a proposal for the state to take control over both Upper and Lower Red Lake, and public meetings organized by two state representatives to discuss these matters cropped up in nearby towns. At the extreme end of these reactions, a new anti-treaty group emerged, publishing a letter threatening to form an armada and assault the reservation borders. However, these threats have likewise been met by strong support for Band sovereignty by state DNR officials, state legislative officials, and non-Indian Bemidji area residents as well, a reaction that may have in part been fostered by the deliberate community outreach of the technical committee and government leaders throughout the recovery project.

The Band has also developed strong regulations for walleye fishing on Red Lake waters, including a system of fines for trespassing by non-Band anglers. However, like for many other tribal fish and wildlife programs, the Red Lake Band's conservation officers are stretched thin. For the Red Lake Band, conservation officers are housed with the Tribal police, not in the department of natural resources. Six game wardens are responsible for fish and wildlife enforcement across the 807,000 acre reservation. Tribal citizen compliance is exceptionally high, but enforcement needs are ever greater. Recent reports of a new black market driven on the State side of the lake have increased concerns (Niskanen 2006a). In an effort to curb illegal selling of walleye for quick cash, the Band is considering paying commercial fishermen more often to minimize this need.

Additionally the walleye recovery has done much to strengthen the mutually beneficial relationship between the Band and the State, and thus far the united front forged by the Band and the State through the work of the technical committee has proven effective in

rebuffing those challenges and insuring the walleye's sustainability. Both the State and the Band have set up and promoted TIP phone hotlines to turn in those who violate limits. Yet for both state and tribal jurisdictions anywhere, the most effective type of policing is public policing. Tribal citizens (as well as the general public) now have more incentive than ever to encourage their fellow citizens to follow regulations and to report those who do not.

Tribal DNR staff members attribute their fisheries management success to many factors. The Band's decision to become a "Self-Governance" tribe allowed it to assume administration of vital tribal programs—such as its Department of Natural Resources—and swiftly carry out the restoration effort free of the BIA's momentum-choking bureaucracy. This more streamlined process of governmental decision-making and enabled the Band to initiate and enact the moratorium two years before the State was able to do so. At Red Lake the tribal council is very accessible; issues can be taken to the council and addressed within a month and the council has a strong record of responsiveness. Additionally, for the last twenty years, the director of the DNR has concomitantly been a council member. This keeps the council informed of DNR activities and needs, helps secure the strength of natural resources as a department, and better guides the DNR in their work as they have a good sense of council wishes. The Band government possessed unwavering political support of the recovery effort, even through three changes in tribal chairmen during the moratorium; its elected leadership was committed to allowing the Band's natural resource managers to do the jobs they were

hired to do.⁷¹ Transparency of Band government operations and decisions relating to the recovery was essential to informing Band citizens and to maintaining their trust; this in turn affected a community-wide understanding of and consistent commitment to the recovery effort.

Meanwhile, wildlife management for Red Lake is a much less dramatic story. Both fisheries and wildlife activities were compacted with the BIA in the early 1980s, but the funding was low and responsibilities were few. Restrictions on hunting for tribal citizens were put in place in 1996, the same year the walleye fishing moratorium began. Although declines in the fisheries had been increasingly noticeable over a few decades, up until the mid-1990s there was little need to manage wildlife on the Red Lake reservation. The first animal to be restricted was moose as populations are declining in northwestern Minnesota; however the decline seems to be due to climate change or parasites and not overharvesting, development or industry. Today Tribal citizens do not need to buy or obtain hunting or fishing permits, although there are bag limits and seasons. Non-citizen activity is highly restricted. Non-tribal citizens may purchase fishing permits to fish on the reservation, but fishing Red Lake itself, as was discussed above, is prohibited. Non-citizen hunting permits and tags enable them to hunt waterfowl and small game on Tribal land, and some big game in an area known as the Northwest Angle, a portion of Tribal land where no Tribal citizens live.

Funding for the Red Lake DNR comes from federal grants and some tribal funds; revenues from the public permit sales do not remain in the DNR. However, Red Lake

⁷¹ For more on the negative impacts of political interference in program administration among Native nations, see Cornell and Jorgensen 2007.

has been a leader in pushing for federal funding of tribal management programs. For example, Red Lake, along with the White Mountain Apache Tribe, lobbied hard for funding resulting in the U.S. Fish and Wildlife Service's Tribal Wildlife Grants program—one of the few sources of federal funding for tribal wildlife management.⁷² This is essential financial support for many tribes including Red Lake. Other cases within this study have also cited the importance of this funding. However, grant success leads to other grant success, so those who have not been successful in securing this funding have a challenging time competing with repeat recipients. Additionally, base tribal funding has supported Red Lake DNR staff efforts to start programs and to provide matching funds for grants. For some tribal fish or wildlife programs without tribal funding, someone is hired to write a grant, and when the effort is not successful, that person is fired and then the whole process begins over the next year. Some base funding is often necessary to get a program off the ground, and that has been the case for the Red Lake fisheries and wildlife management programs. Red Lake DNR staff also credit some this success to leadership in proactive behavior among tribes. For example, since under the leadership of former Chairman Roger Jourdain—the Red Lake Band's first and longest serving chairman—the Band has made concerted efforts to stay connected to Washington, D.C. This kind of leadership is explained by one staff member,

I think in terms of success, the big reason Red Lake is very successful is the political savvy and the political knowledge that comes along with these programs. A lot of tribes in the Great Lakes Regions don't know what happened to TLIP or TWG⁷³ or how that all happened. All they know is they have it now. But it takes

⁷² Red Lake and WMAT also helped include tribes in the language of the proposed CARA legislation, currently stalled in the legislature (see Ch. 3 section on WMAT).

⁷³ These are the two U.S.F.W.S. grants for tribal wildlife management.

a tribe like Red Lake to know what's going on in Washington. To go to Washington and lobby. To push for this stuff. To make sure they're not pulling something over on everybody like they would have if somebody wouldn't have said, 'Hey this is wrong. We deserve a share of this money.' That's the first step to getting access to some of those funds—somebody knowing what's going on over there and taking the steps necessary.

Red Lake staff members serve on the Interior Tribal Budget Advisory Council, keeping informed of and active in important financial decision-making on the federal level.

Outcomes

Red Lake has set itself apart as a leader in fisheries management. The Red Lake walleye recovery is one of the most incredible success stories among fisheries management in the U.S. The Chippewa people generally have a long history of amiable relations with the federal government, and strong efforts have been made to foster good relations with the State of Minnesota. In the case of the walleye recovery, pooling economic and human capital with outside agencies led to cooperative projects that benefited the fisheries resource, the economy, and the way of life. The Tribe invested both people and finances in cutting-edge scientific data collection and assessment, which has positioned it as an authority on Red Lake's health and how best to manage it. Whereas a lack of regulation once was the norm, the walleye harvest is now managed methodically and cautiously by the technical committee in accordance with its strategic plan for long-term sustainability. The committee has established a process for determining seasonal harvest quotas for the entire lake based on its biology (specifically

the health of its spawning walleye stocks) and allocates numbers proportionately to the Band and State based on ownership of Red Lake.⁷⁴

For Band citizens, the recovery means a renewed pride in themselves and in the Band. Because the moratorium created essentially a gap in the generation-to-generation teaching of fishing techniques, there was some concern fewer citizens—especially young citizens—would become fishermen again. This has not been the case. Many tribal citizens again rely on walleye for subsistence, and economically walleye fishing has brought independence back at both the tribal and individual levels. There has also been a shift in mood throughout the community, sensing new optimism and an infectious entrepreneurial spirit. Red Lake Chairman Floyd “Buck” Jourdain noted that families are getting back together again and teaming up to create family fishing businesses, and the general family time spent together seems to be enjoyed by all. One young man bragged about spending the evening with his dad, typical of many young people proud to have spent the day fishing with their parents. Another father stated, “I haven’t spent this quality time with my boys since they were young.” These families are spending quality time, children once again learning work values through fishing with their parents, all while making money and strengthening family bonds.

The commercial fishery is also beginning to have a ripple effect on the area in and around the reservation. After the fishery reopened and the first paychecks were dispensed, tribal citizens could be seen driving back from the nearby off-reservation town of Bemidji with washing machines, refrigerators and beds in their vehicles—the happy

⁷⁴ The technical committee determines the seasonal harvest quotas based on pounds-per-acre mature female biomass.

sign that people who had been doing without for so many years were now able to buy what they needed. Small business owners in the private sector as well as tribal enterprises are beginning to experience the benefits of a healthier economy.

As further testament to the Red Lake Band's establishment as a leader in fisheries management, the Red Lake Band has consulted the Ontario Ministry of Natural Resources on walleye sustainability for Lake Nipissing's tribal commercial and sports fishery. Additionally, the Red Lake DNR is exploring options for developing commercial agreements with some Canadian First Nations. The First Nations may be able to cut costs by utilizing the Red Lake plant to provide the processing services for the Canadian walleye. Additionally, this would enable the Red Lake facility to operate during the off-season for Red Lake walleye, keeping plant workers employed more continuously throughout the year.

The walleye recovery alone would set the Red Lake Band apart as a leader in resource management. However, the recovery was possible in part because Red Lake has always fought for self-determination. In addition to rejecting allotment, becoming a Self-Governance tribe and actively pursuing federal legislation, the Red Lake Band also fought state civil and criminal jurisdiction which was granted to states under P.L. 83-280 and consequently the Band was specifically exempted from this law⁷⁵ (Red Lake Net News 2008). Once again, through the recovery process, the Red Lake Band demonstrated true exercise of sovereignty, making decisions in the best interest of the nation, working with the State in a government-to-government relationship, and planning

⁷⁵ PL 83-280 is discussed elsewhere in this dissertation.

for the sustainability of the walleye, the people and the Red Lake Chippewa way of life. As Chairman Floyd Jourdain put it, “Red Lake has always held that sovereignty is the basis for everything. Without it, we cease to exist. It needs to be used in spots strategically where it is going to benefit the people.” The Band was assertive in their efforts; the citizens demanded something be done to protect the resource, and the Band was going to act, with or without the State. Rather than exercising sovereignty as a defense in a crisis, the Band exercised sovereignty proactively. The recovery gave the Band and its citizens’ confidence in its ability to self-govern and self-determine. The recovery also strengthened the Band’s ability to work with the state and federal governments. The Red Lake Band has demonstrated it can advance the prerogative of its citizens to “never again allow their self-proclaimed ‘food store’ or ‘storehouse’ to run dry,” (Kolpack 2006) so that the fisheries can bring untold future generations of Red Lake people the same physical and cultural sustenance it brought their ancestors.

7. Fond du Lac Band of Chippewa

The Fond du Lac Band of Chippewa manages fish and wildlife on-reservation, although both fish and wildlife populations on-reservation are fairly modest. Most Fond du Lac management is focused on both fish and wildlife within the vast ceded territories.

Background to Fond du Lac Fish and Wildlife Management

The Fond du Lac Reservation lies in east-central Minnesota just west of the edge of Lake Superior and is home largely to the Lake Superior Band of Chippewa.⁷⁶ Fond du

⁷⁶ Indeed “Fond du Lac” means at “the edge of the lake.”

Lac is a member of the Minnesota Chippewa Tribe, a confederation of six Chippewa reservations in Northern Minnesota which first signed a treaty with England in 1766 (Fond du Lac 2008; Tiller 2005).⁷⁷ A subsequent treaty was signed between the Fond du Lac Chippewa and the United States in 1837 and the Treaty of La Pointe was signed in 1854 establishing the Fond du Lac Reservation at 100,000 acres (Fond du Lac 2008). Through both of these treaties with the United States, the Fond du Lac Band ceded vast amounts of territory at 3.5 million and 5 million acres respectively. On these lands, they retained hunting and fishing rights. Article 11 of the Treaty of La Pointe states:

All annuity payments to the Chippewas of Lake Superior, shall hereafter be made at L'Anse, La Pointe, Grand Portage, and on the St. Louis River; and the Indians shall not be required to remove from the homes hereby set apart for them. And such of them as reside in the territory hereby ceded, shall have the right to hunt and fish therein, until otherwise ordered by the President.

The Minnesota Chippewa Tribe ratified its constitution in 1934 under the Indian Reorganization Act allowing for a centralized Chippewa government while each member reservation would establish a “reservation business committee” to handle local affairs (Fond du Lac 2008). Today this governmental form’s legitimacy is contested by some senior Fond du Lac Band citizens who argue the Band never signed the constitution and was made part of the greater Minnesota Chippewa Tribe without the Band’s consent (Tiller 2005). Nonetheless a reservation business committee handles Fond du Lac affairs through a strong chief executive form of governance and sends a representative to the Executive Committee of the Minnesota Chippewa Tribe.

⁷⁷ Red Lake is not a member of the Minnesota Chippewa Tribe.

Allotment significantly reduced the size of the reservation. Today 22,902 acres lie within the exterior boundaries, and slightly less than 25% of this is tribal land, the other owners being non-Indian individuals or timber companies (BIA 2004). Tribal enrollment for the Fond du Lac Band is 3,902 citizens (BIA 2003). The reservation population is slightly less than this at 3,728, but only 40% of reservation residents are American Indian (Census 2000). As with the Confederated Salish and Kootenai Tribes, the higher percentage of non-Indians is correlated with higher educational achievement and income; 82.8% of residents have a high school degree and the per capita annual income is \$15,551—the highest by far in this study, while still being only 72% of the national per capita income (Census 2000).⁷⁸

The Fond du Lac Band today operates in a somewhat unique jurisdictional situation. Minnesota is one of a handful of states affected by PL-83-280. The ramifications of PL-280, as discussed earlier in this dissertation, mean that the State of Minnesota has criminal jurisdiction—except for wildlife crimes—and civil jurisdiction over tribal citizens on tribal land. However, the Band shares civil jurisdiction and consequently also has a tribal court and tribal police force.

Fond du Lac is a case where formal management of fish or wildlife is a relatively recent phenomenon. Although the reservation base is fairly small, access to the vast and plentiful ceded lands has not created an immediate need for management—particularly when the State of Minnesota was happy to assume management authority. As for many Native American people, subsistence hunting and fishing were and are an important part

⁷⁸ Unemployment is also the lowest among this study's cases at 22% (BIA 2003).

of Fond du Lac culture and sustenance. One interviewee expressed this importance when he said, “I could probably talk for a long time about this because it is near and dear to my heart. It has been something that has been part of me my entire life. I hunted, I fished, I gathered, I trapped—everything—when I was a kid. And growing up, that was just part of life. My grandpa, my dad, they taught me how to do all this.” The State of Minnesota imposed and enforced state hunting regulations on tribal citizens (even on tribal land). Tribal citizens—feeling it was their right to engage in these activities as they always had—virtually ignored the state authority. For example, one man recalled: “I remember as a kid, we’d go out and shoot deer when we needed them. There was really no season for it. The only thing we had to do was make sure we weren’t caught by the white warden.” In 1974 the Tribe developed its first on-reservation fish and wildlife code, but some citizens were resistant: “My grandpa, I can remember him standing firm that ‘we don’t need a license and we don’t need a code. We know when we need a deer, we know when we need fish and we should be able to go out and take it when we need it.’” Yet the tribal code was preferable to state regulations. Though several versions, pain-staking efforts were made to create a code that reflected traditional practices, and the tribal population generally accepted it. Concomitantly, the Band hired tribal conservation officers to enforce the new tribal code.

Formal management did not begin for the Band until several decades later. In fact, today very little management goes on within the reservation boundaries, as a *laissez-faire* approach continues to be regarded as appropriate. Instead, the Tribe has focused efforts off-reservation on the ceded lands; this interest has developed in part from recent

court cases involving both the 1854 treaty ceded territory and the 1837 treaty ceded territory (referred to as “the 1837” and “the 1854”).

In 1985 Fond du Lac joined the Grand Portage and Bois Forte Bands of Chippewa in a lawsuit in U.S. District Court against the State of Minnesota for hunting and fishing access free of state interference in the 1854 territory. In 1988 out-of-court negotiations resulted in the tribes agreeing to exercise limited rights in exchange for annual monetary compensation of approximately one million dollars each. The three bands joined together in an inter-tribal organization now known as the 1854 Treaty Authority to implement the agreement (1854 Authority 2008).⁷⁹ The three bands worked in parallel to make regulation codes for the 1854 treaty area that fit their people’s traditional activities, and this process was also mediated through the court. According to the former director of the 1854 Authority as well as of the Fond du Lac Resources Management Division, this mediation was beneficial to the bands; he feels that had the bands sat down together with the state, they would have had to make greater compromises. Here is a situation in which direct negotiation and cooperation perhaps would not have been the best means to achieving the tribe’s goals.

At the time of the lawsuit over the 1854 lands, the Fond du Lac Tribe was experiencing a lot of political unrest. The Fond du Lac Reservation Business Committee originally accepted the 1988 agreement negotiated with the state, but some Fond du Lac citizens felt that the arrangements resembled a selling of treaty rights and that the 1854 Treaty Authority was exceeding its authority. Consequently in 1989 Fond du Lac

⁷⁹ Originally this organization was called the Tri-Band Authority.

withdrew from the 1854 Treaty Authority. The former director of the Fond du Lac Resource Management Division said that the withdrawal was to some extent unfortunate in that Fond du Lac basically managed “their hunting and fishing rights in the same manner that was prescribed under the agreement but [did not receive] any money for it.” The other member tribes have received monetary compensation for management costs for the past 20 years, substantially supporting their programs within the resource division. Yet Fond du Lac’s withdrawal from the agreement but continuation to manage similarly illustrates the importance the Tribe places on its own authority to exercise their treaty rights. (In some ways this resembles the relationship the Yakama Nation has with CRITFC.) The 1854 lands are still an on-going case. Until it is determined, Fond du Lac fisheries and wildlife staff members are focused on managing in the 1854 ceded area, exercising that authority to the fullest extent possible in order to demonstrate management capacity.

Meanwhile, while actively involved in the 1854 case, Fond du Lac was pulled into a separate lawsuit over the 1837 treaty area. In 1994 The Mille Lacs Band of Chippewa and the State of Minnesota went to court over treaty rights to hunt, fish and gather in the 1837 ceded territory. The state claimed the rights were absolved through an 1850 Executive Order, a subsequent 1855 treaty with Mille Lacs, and admission of the State of Minnesota into the Union. Six other Chippewa Bands who had signed the 1837 treaty joined in the lawsuit—Fond du Lac by request of the court. In 1999 the case went to the U.S. Supreme Court where it was ruled that the Bands had retained their rights in the ceded area. In a similar series of cases for tribes in Wisconsin that signed the 1837

treaty collectively named *LCO I-VII* (for the main litigant, the Lac Courte Oreilles Tribe), the final court rulings stated that the State of Wisconsin retains ultimate management authority, even though the bands are entitled to 50% of the allowable harvest from the major lakes.⁸⁰ Although the Minnesota case did not set a specific proportion or declare ultimate management authority, the Wisconsin decision would no doubt be taken into account if the courts were forced to define the harvest allocations and declare authority. Without these rulings, the bands and the State of Minnesota now manage the 1837 area co-operatively.

Late Beginnings

In the mid-1970s Fond du Lac enlisted its own conservation officers to regulate tribal citizen activity under the newly developed tribal fish and game codes. The tribal resource management division began in about 1972 with the hiring of their first seasonal wild rice worker. For decades, and into the present, wild rice management on the reservation has been paramount to the Fond du Lac people. Later, as a result of the multiple litigations and ensuing decisions described above, the Fond du Lac Band began management of off-reservation rights in the two ceded territories. The off-reservation fisheries program began in 1993 and the off-reservation wildlife program began in 1994. The Fond du Lac fish biologist and wildlife biologist are highly educated professionals,

⁸⁰ Through *LCO I-III* and the initial case *United States v. Bouchard*, Judge Doyle gained notoriety similar to that of Judge Boldt through the Washington litigation. Judge Doyle became an expert in Chippewa treaties and ruled in favor of supporting treaty rights, refusing to set a proportional limit as was done in the Washington cases. However, upon his death, Judge Crabb replaced Judge Doyle in *LCO IV* and beyond, arguing that “the tribes’ rights to collect resources was limited to the amount needed to provide a ‘modest’ standard of living” and that “the allocation of the harvest can be adjusted if the Indians’ moderate living needs declined to a level where they could be satisfied with less than 50% of the harvest” (Getches et al 1998:879).

leading cutting edge research projects in the ceded territories and publishing regularly in peer-reviewed journals. Together they share about nine technicians with the other programs within the resource management division, and their responsibilities center on the ceded lands and occasionally spill over onto the reservation when necessary. No other case in this study had staff devoted specifically to off-reservation management. At Fond du Lac, there are no fish or wildlife staff solely responsible for on-reservation management. In total, about 11 fish and wildlife employees work in these programs housed in the Fond du Lac Resources Management Division. They are supported by eight conservation officers entrusted with the task of enforcing three separate sets of hunting, fishing and gathering regulations—for the reservation, the 1854 territory and the 1837 territory.

Working with Others

Because of their off-reservation management and their checkerboard management jurisdictions on reservation, the Fond du Lac fish and wildlife staff work continuously with county governments, the State of Minnesota and several federal agencies, depending on the ownership of the specific area of interest. The staff feels that their relationships with outside agencies are quite collegial. Staff members particularly described their relationship with the state as one of trust and respect and void of animosity. In fact, the Fond du Lac NRD staff members suggested I also meet with several state natural resource staff to best understand tribal management. This seems a testament to the good will between the parties, as otherwise the Fond du Lac staff surely would not want to involve adversaries in representing their programs. The tribal staff feel their work has

been much easier due to this relationship. In an effort to describe how this relationship has been fostered, one Fond du Lac staff member said, “I don’t really want to say it’s because of personalities, but it just might be a function of open lines of communication. And maybe we don’t have an agenda we’re trying to either push or hide.” Another offered some insight on his own philosophy:

Certainly in my program, I made a conscious effort when I got here to contact my peers in the state agency, the forest service, [other] federal agencies as well, and introduced myself. I got to know them, to find out what their [resource] issues were and look for ways we could find projects to benefit both our constituencies. And that I think for me and the [resource] program that went a long way. I didn’t come here with an “us against them” attitude, but I could have. I don’t think the program would be where it is if I had.

The wildlife manager offered a specific example: “The moose population: tribal members are using it, and state members are using it. And here’s what the state is doing for moose and here’s what still can be done for moose, so why don’t I jump in there? There isn’t an agency out there that’s trying to reduce moose numbers. We all want to keep moose around, and we’d all like to have more of them. And none of the agencies by themselves really has the resources to do it alone. So we’re stronger working together.” With the exception of moose, which have been on the decline all over northern Minnesota (due perhaps to a parasite), these collegial relations are at least in part aided by the abundance of the natural resource base. An employee with the State of Minnesota Department of Natural Resources said, “The natural resources in this part of the world are so abundant and relatively un-impacted by users at this point, compared to many places in the country. So when there is a lot there to begin with, it’s easier to share it. And I’m sure that’s part of it.” Most of the lakes within the reservation are rice lakes, and the others are not ideal

habitat for fish. Additionally, the most common large game on the reservation is deer—there are no large elk herds, for example—but there are plenty of healthy deer off the reservation as well.

Within the reservation, there is less state-tribal interaction than there is outside of the reservation. Good relations internally mean maintaining clear jurisdictional boundaries—separating out responsibilities, not sharing them. The Fond du Lac Band is unusual in this study in that non-citizens are allowed to hunt and fish not only within the exterior boundaries of the reservation, but they are also allowed to do these activities on tribally-owned land—under state regulations.⁸¹ (Keep in mind, there is very little fishing on the reservation as most lakes are shallow lakes not ideal for fish habitat. Duck hunting does occasionally have the potential to interfere with tribal rice harvesting, but does not appear to pose a significant problem.) These activities are not regulated by the Band, but rather, are regulated by the state. Whereas this kind of authority asserted by the state has been challenged, resisted or at least abhorred amongst citizens of the other cases in this study, for Fond du Lac, this process is normal and even seen as a means for keeping peace with the State of Minnesota and the non-citizen public. One employee commented, “It’s normal. I think some tribal members might talk about it but, you know, it’s been that way.” Another dismissed a question about non-citizen use of tribal land by commenting that tribal land is generally treated like public land. Almost identical language was used by a CSKT citizen who said that it was because tribal land was treated like public land that something had to change.

⁸¹ An exception can be made where the Bands have posted signs restricting non-member activity.

In the past, the state regulated everyone—tribal citizens and non-tribal citizens alike. When the Band asserted its authority, it demanded that Band citizens be regulated by the Band, which would allow for higher harvest limits. This was a comparatively smooth transition in that nothing changed for non-citizens hunting or fishing; however state officers were slow to stop citing Band citizens. Nevertheless, no interviewees at Fond du Lac had ever heard concerns from citizens about the potential economic loss (non-citizens could be buying tribal licenses instead of state licenses as they do elsewhere in this kind of situation) or ever heard serious concerns about a tribal resource being harvested by non-tribal citizens. All interviewees agreed tribal regulation of non-citizens would be too difficult to enforce, and in this hypothetical situation was seen as almost unenforceable. Fond du Lac is on the low end of the continuum regarding the percentage of tribal land within the reservation boundaries and tribal citizens as a percentage of the reservation population, although these proportions are fairly similar on the Flathead Reservation and the CSKT have been able to assert authority over citizens and non-citizens alike. However, many Fond du Lac citizens are married to non-citizens. The current jurisdictional arrangement allows for these families to still hunt together on the same land. Recall this has not been the case for the CSKT where tribal citizens may not hunt with non-citizens unless the tribal citizens also buy a state license.

In 1984 Fond du Lac joined the Great Lakes Indian Fish and Wildlife Commission (GLIFWC), an intertribal organization similar to CRITFC in the Columbia Basin. GLIFWC provides enforcement, resource management services, public education, funding and legislative expertise for its member tribes. It was designed to “help ensure

significant, off-reservation harvests while protecting the resources for generations to come” (GLIFWC 2008). GLIFWC is overseen by a board of commissioners consisting of a representative from each of the 11 member tribes from throughout Minnesota, Michigan and Wisconsin. For Fond du Lac management, GLIFWC channels important federal funding and other moneys to the tribe. Outside of this support, Fond du Lac’s relationship with GLIFWC resembles much of the relationship between the Yakama Nation and CRITFC. While GLIFWC’s authority comes from its member tribes’ delegation, intertribal organizations have the ability to appear to supersede tribes. Fond du Lac staff mentioned that local control (i.e. Fond du Lac control) of their resources was better than this distant oversight.⁸² Fond du Lac has found it to be more effective to manage on its own, and consequently has its own codes, management plans and regulations, but occasionally relies on the biological expertise services of GLIFWC.

Support for Management

Although Fond du Lac considers itself having amiable relations with the state and with GLIFWC, the Band has chosen to be the sole source of enforcement for Fond du Lac tribal citizens. This has been a trade-off. Because the Tribe has decided to retain full authority over its own citizens, it does not cross-deputize the state officers to handle fish and wildlife cases with Band citizens. This is always an option—for one jurisdiction to grant authority to another—and in a checkerboard jurisdictional area like the Fond du Lac reservation, there could be some benefits. However, the Tribe prefers to have the state

⁸² Note Fond du Lac does not consider GLIFWC to be local. Although the organization’s headquarters are in Oshkosh, WI, its conservation officers are based in the areas they enforce and many consider GLIFWC to be a local management organization.

wardens contact the tribal wardens on matters relating to tribal citizens. In turn, the state will not cross-deputize the tribal wardens. In contrast to other cases where cross-deputization is an example of a decent working relationship with the state, Fond du Lac finds that within reservation boundaries, it works best to not overlap jurisdiction. Interestingly, this means that the state is enforcing state laws on non-citizens on tribally-owned and non-tribally-owned land (i.e. everywhere within the exterior reservation boundaries, and outside), and the Tribe is enforcing tribal laws on tribal citizens both on and off the reservation. Tribal citizens' hunting or fishing activities in the ceded areas fall under the tribal codes; if their behavior breaks a code, they may be detained by tribal officers and sentenced in tribal court. While the eight tribal enforcement officers enforce the three different codes on the reservation, in the 1854 and in the 1837—an area of nearly 9 million acres—the officers feel that they have enough staff for the work they currently do. This feeling of sufficiency is very unusual; enforcement officers at all other case programs in this study felt in need of more officers.

The Fond du Lac fish and wildlife programs are also unique in that they receive what their staff considers adequate funding for their current operations. Of course, they admit, with more money, they could do more work. Yet comparing themselves to the state department of natural resources, which has experienced major funding cutbacks in recent years that have led to layoffs and strained programs, the tribal fish and wildlife programs find themselves operating without concern. Their main sources of funding are BIA 638-contracts, U.S. Fish and Wildlife Service and other grants, and tribal casino revenue. The tribe funds the conservation officers. Employees of these tribal programs

have regular pay raises and good benefits that are comparable or better than those of state DNR employees. Conservation officers as well have nice equipment and feel that they are paid reasonably, perhaps less than state wardens, but more than most other tribes' officers. Such contentment with monetary compensation was not found among any of the other tribal staffs.

Another benefit for resource management is that Fond du Lac's current secretary/treasurer is the former resource management director. As is the case for the Red Lake natural resources department, this connection at Fond du Lac has been extremely beneficial to resource management division as the secretary/treasurer is aware of the needs within the division's programs and consequently tends to provide the support required to meet those needs. Furthermore, the secretary/treasurer is well aware of the legal issues surrounding managing these resources, particularly in relation to the state, and therefore can help facilitate many of the operations necessary to running the programs. However, this connection is happenstance, as there has never been a current resource management division director serving as a council member and could not be, as council members must resign from their current jobs in order to assume the council position. At the same time, this particular connection is beneficial to the division.

Outcomes

Fond du Lac has demonstrated its commitment to self-determination through natural resource management and thus far has been able to achieve what it has wanted to do. Their involvement in the litigation for hunting, fishing and gathering rights in the 1854 and 1837 territories has been significant. With the court decisions for the 1837

territory, Fond du Lac has taken the initiative to turn those confirmed rights to hunt, fish and gather into rights to co-manage, an authority that can only be achieved through demonstrated capacity. Similarly, for the unresolved situation in the 1854 territory, the Tribe and its Resource Management Division are proactively managing the resources and the tribal citizens who use them in anticipation and support of a final court ruling on the management authority and tribal rights for the area.

The Tribe's relations with the 1854 Treaty Authority, GLIFWC and the State of Minnesota also demonstrate their capacity to self-govern and to choose the course that governance will take. Although the Tribe's withdrawal from the 1854 Treaty Authority was controversial, the intention was to retain and exercise its rights instead of accepting monetary compensation for not doing so. Fond du Lac's approach to working through GLIFWC also demonstrates the importance of self-management, utilizing GLIFWC resources when they aid tribal endeavors. The Tribe also interacts with the state on a government-to-government basis, having successfully pushed state jurisdiction away from tribal citizen activity and not working with the state in a co-management capacity as well.

Fond du Lac management is unique in many ways. The staff view their management as a responsibility to the tribal citizens, to the resources and to the non-tribal public. One manager stated, "Not only do Indians live out here but non-Indians live out here also... Not only do we manage the herd for the tribal citizens on the reservation, but also for the non-tribal citizens. They also hunt, fish and gather in that area." Yet there are no direct economic benefits to the Fond du Lac fisheries or wildlife management

programs, as non-citizens hunting or fishing on the reservation buy standard state permits from the State of Minnesota. Additionally, Fond du Lac does not charge tribal citizens for their hunting, fishing and gathering cards (which have come to be used regularly as primary identification cards), so no income is generated from the tribal programs, making Fond du Lac again unique among the (case study) cases in this research. However, if good relations with the state are accounted for, the costs of litigation avoided have certainly benefited the Fond du Lac Band. Both management staff and tribal citizens are content with the health and abundance of their resources and not particularly discontent with arrangements for tribal and state jurisdictions within the reservation boundaries. They seem to view this arrangement as one in which they are avoiding conflict and enforcement challenges, rather than as one in which they are compromising resources and authority.

Perhaps abundant resources help these state-tribal relations. In terms of sustainability, the Fond du Lac has had a head start in comparison to many other tribes as their resources have not been in need of careful management. However, the greatest contribution of the fish and wildlife management efforts—and the one they were initiated for—is good management in the ceded areas with enough presence that the state and other management agencies recognize Fond du Lac as an equal player in the management arena.

Table 3.1 Quick Glance at Seven Cases

	Crow	CSKT	Yakama	WMAT	San Carlos	Red Lake	Fond du Lac
Checkerboard Land Base	Y	Y	Y	N	N	N	Y
Tribal Jurisdiction Over Non-Tribal Citizens On Tribal Trust Land*	Y	Y	Y	Y	Y	Y	N**
Tribal Jurisdiction Over Non-Tribal Citizens Anywhere Within the Reservation*	N	Y	Y	Y	Y	Y	N
Tribe Ceded Lands to the United States	Y	Y	Y	N	N	Y	Y
Tribal Regulation of Tribal Citizens in Ceded Territories	N	Y	Y	n/a	n/a	Y	Y
Geographical Focus of Tribal Management	On-res.	Mainly on-res., but some off-res.	Both on-res. and off-res.	On-res.	On-res.	Mainly on-res., but some off-res.	Mainly off-res., but some on-res.

*Tribal jurisdiction here means jurisdiction regarding fish and wildlife matters.

**On tribal trust land, the Fond du Lac Band has rights similar to those of any other private property owner. However, the Band has no jurisdiction over non-tribal citizens anywhere within the reservation's exterior boundaries.

Table 3.2 Tribal Regulation for Seven Case Studies

	Crow	CSKT	Yakama	WMAT	San Carlos	Red Lake	Fond du Lac
Fishing: Tribe formally regulates tribal citizens through seasons, species, or harvest limits	N*	Y	Y	Y	Y	Y	Y
Fishing: Tribe requires permits for citizens	N	N	N	N	Y	N	N
Fishing: Tribe requires PAID permits for citizens	N	N	N	N	Y	N	N
Hunting: Tribe formally regulates tribal citizens through seasons, species, or harvest limits	N	Y	Mostly N (very liberal with a few exceptions)	Y	Y	Y	Y
Hunting: Tribe requires permits for citizens	N*	Y/N (required for some species)	Mostly N (required for just a few species)	Y	Y	N	N
Hunting: Tribe requires PAID permit for citizens	N	N	N	Y	Y	N	N
Fishing: Tribe regulates non-tribal	Y/N (tribe regulates on	Mostly Y (special	Y	Y	Y	Y	N (state regulates

citizens	tribal land; state regulates on non-tribal land)	joint tribal-state permit for non-tribal citizens members who live within res.)					non-tribal citizens)
Fishing: State regulates non-tribal citizens	Y/N (tribe regulates on tribal land; state regulates on non-tribal land)	Mostly N (state sits on joint board that proposes joint tribal-state permit)	N	N	N	N	Y
Hunting: Tribe regulates non-tribal citizens	Y/N (tribe regulates on tribal land; state regulates on non-tribal land)	Mostly Y (special joint tribal-state permit for non-tribal citizens members who live within res.)	Y	Y	Y	Y (including in certain ceded lands)	N
Hunting: State regulates non-tribal citizens	Y/N (tribe regulates on tribal land; state	Mostly N (state sits on joint board that	N	N	N	N	Y

	regulates on non-tribal land)	proposes joint tribal-state permit)					
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*The Crow Tribe does prohibit spotlighting and wasting. The tribe also regulates tribal citizen buffalo hunting by requiring special permits.

CHAPTER FOUR:

FsQCA RESULTS

I now turn to the fuzzy-set qualitative comparative analyses (fsQCA), described in some detail in Chapter Two. Many factors may influence the outcomes of tribal management itself, healthy resource populations, and revenue. The factors analyzed below were identified through the CPR, Indigenous governance, or organizational literature as well as through my initial case study research.

From the common pool resource literature, several conditions have been identified in seminal works that may be influential in particular for tribal fish and wildlife. These include the following:

- *Tribal jurisdiction* indicates that the tribe has regulatory and adjudicatory jurisdiction over non-tribal citizens within the exterior boundaries of the reservation. In the CPR literature, we find that sustainability of the commons is more likely when rules for governing commons are locally devised (Wade 1988; Ostrom 1990; Baland and Platteau 1996).
- *Steady funding* indicates funding to the program is more or less consistent and *adequate funding* indicates that the program has enough funding to meet program goals. Baland and Plateau (1996) have found that external aid offered to locals for conservation efforts helps maintain resource sustainability. These factors are also important because they emerged in the initial case studies and subsequently as one of the factors tribal programs themselves identify as most important.

- *Contiguous land base* indicates that the tribe controls a large proportion of the land within reservation boundaries. In addition to being identified by research participants through the case study research as important, a contiguous land base also helps define resource system boundaries (see Wade 1988 and Ostrom 1990) as well as serves as a proxy measure for homogeneity in identities and interests, a factor other scholars have found to positively influence sustainability (see Baland and Platteau 1996).
- *Citizen regulations* indicates that tribal citizen hunting and fishing activity is highly (and formally) regulated by the tribe. Wade (1988), Ostrom (1990) and others argue that clearly defined resource-user boundaries promote resource sustainability. Formal hunting and fishing regulations for tribal citizens mandate a clear understanding of citizenship (who can and cannot engage in these activities), and identify any variations in regulations within that group of citizens (for example, elders may have a special season).
- *State relations* indicates that the tribe and state have a productive relationship. Wade (1988) and Ostrom (1990) summarize work that finds sustainability supported when centralized (state) government does not undermine local (tribal) authority. Another way the state can support resource sustainability is by sanctioning resource abusers outside of the reservation boundaries (i.e. when under state jurisdiction) (see Baland and Platteau 1996), also a manifestation of productive tribal-state relations.

- *Longevity* accounts for the tribal programs' employees having long tenures with the programs. The longevity of tribal fish and wildlife employees was immediately evident among my initial case study research. However, longevity may also incorporate having had past successful experiences in management, found in the literature to support sustainability (see Wade 1988 and Ostrom 1990).
- *Non-citizen activity* denotes that non-tribal citizens may hunt or fish tribal resources under tribal regulations. There is indication in the CPR literature to suspect that allowing non-citizens to harvest tribal resources would have a negative impact on sustainability, as scholars have found an overlap between resource users and resource location to be beneficial as is interdependence between resource users—which would be less likely the case between non-citizens and citizens (see Wade 1988; Baland and Platteau 1996).

From the organizational literature in particular, we incorporate two governance structures:

- *Clan* indicates that the tribal program has a high degree of clan-logic or clan organizational characteristics. Although the term clan comes from the organizational literature (see for example, Ouchi 1980), the CPR literature identifies components of clan structures that support sustainability, including shared norms, formal leadership which is connected to traditional elite, and, again, the homogeneity of identities and interests as well as interdependence (see Wade 1988; Baland and Platteau 1996).

- *Bureaucracy* indicates that the tribal program has a high degree of bureaucracy or bureaucratic organizational characteristics. Again, clearly, this concept comes directly from organizational literature. However, the CPR literature on the value of clan-like features in successful local governance implies that greater bureaucracy could have a negative effect.

In addition to speaking to many of the factors listed above, the literature on Indigenous governance offers two more factors:

- *Cultural match* indicates a strong cultural match between the traditional or cultural practices of hunting and fishing and the institutionalized norms regarding these activities (see Cornell and Kalt 1992; Jorgensen 2007; Harvard Project 2008).
- *Court ability* indicates that the tribal court is highly effective at handling fish and wildlife matters. The importance of effective tribal courts is particularly supported through the work of Skari (1992), Nesper (2007), and the Harvard Project (2008). From the CPR literature, Ostrom (1990) has also identified the importance of low-cost adjudication; however, effectiveness is arguably at least as important.
- *Tribal management*, an outcome as well as a condition, indicates that the tribe itself has a fish and wildlife management program. Beyond jurisdiction, NNI and Harvard Project research has shown that sovereignty *in practice*—wherein the Native nation calls the shots—is necessary, but not sufficient, for any kind of

successful program within Indian Country (see Cornell and Kalt 1992; Krepps 1992; Jorgensen 2007; Harvard Project 2008).

Lastly, beyond what factors the literature offers us, some key factors to consider emerged from the initial case study research. These include the following:

- *Large land base* indicates that the tribe owns a significant amount of land. In addition to funding, this was the second factor interviewees and other contacts referred to most often when discussing what enables good resource management. Interestingly, much of the CPR literature suggests that a small land base (or at least a small resource system) is more beneficial for effective local management (see Wade 1988).
- *Dedication* indicates that the tribal fish and wildlife programs have highly dedicated employees.
- *Proactive behavior* indicates the tribal government or tribal department is highly proactive in working towards tribal management.
- *Revenue control* implies that the revenue earned by the tribal programs remains in the tribal programs.
- *Treaty rights* indicates that the tribe has reserved rights to hunt and fish through a treaty with the federal government.
- *Tribal support* indicates that the tribe is very supportive of the tribal fish and wildlife programs.
- *Biologists* indicates that the tribal program has at least one biologist on staff.

A brief reminder: fsQCA assumes that causation is multiple and combinatorial whereby particular causal factors may be necessary but not sufficient, sufficient but not necessary, or both. This allows for multiple pathways (or “recipes”) to lead to the same outcomes, better reflecting causality in the real world. FsQCA also provides indicators of the consistency and coverage of individual and sets of pathways in relation to the outcome. With fsQCA, consistency indicates the degree to which a subset relationship between a condition or set of conditions and an outcome has been modeled (Ragin 2006). Coverage on the other hand evaluates the empirical relevance of subsets, that is, the degree to which a condition or set of conditions accounts for the outcome (Ragin 2006). If there are many pathways to a particular outcome, coverage for any one pathway (combinations of conditions) may be low, even if consistency is high suggesting that although there is a strong set-relation regarding sufficiency between that pathway and the outcome, the pathway does not explain much of the outcome and therefore is not of much interest (Ragin 2006). FsQCA also allows us to partition coverage to look at both the raw and unique coverage of sufficient conditions or combinations of conditions. This is important because any particular case may take more than one path to an outcome. Because coverage assessments allow us to determine the empirical relevance of sufficient subsets, we can further evaluate the importance of logically equivalent pathways (Ragin 2006).

Below I first consider tribal management itself as an outcome. I then examine outcomes within tribal management (regarding revenue and wildlife population health).

All of the analyses are conducted for both the case studies as well as for the survey cases, unless otherwise noted.

1. Tribal management

Seven cases:

This initial analysis is unique. While the other analyses below will be performed as described in the methods chapter of this dissertation, fsQCA analysis of tribal management among the seven cases is primarily descriptive. That is, there are no negative cases (or tribes without fish and wildlife programs they manage), making this initial analysis about finding the different sorts of “recipes” that make tribal management. In this type of analysis, sufficiency cannot be demonstrated, but identifying necessary conditions can be valuable if carefully evaluated in light of consistency, coverage and substantive and theoretical knowledge.

All seven cases have high membership in the condition dedication and demonstrate high clan logic. In fuzzy-set QCA the necessity of a condition is demonstrated when the fuzzy scores for the condition are greater than or equal to the scores for the outcome (tribal management) across cases. The scores for membership in both dedication and clan are as high (fully in) as the scores for tribal management for six of the seven cases. Fond du Lac is the exception although its conditions’ scores are also high (.8 for each condition). Although typically in fsQCA analysis we would view these conditions as not very analytically powerful because they are so high across cases—as are other potential conditions that make little sense, such as the existence of air—substantively and theoretically their presence makes sense. Both conditions have a

consistency measure of .9714 clearly indicating a set-relationship where the outcome tribal management is a subset of dedication and clans; further, the unique coverage of each condition is 1.0 indicating the conditions of dedication and clan-like operations are highly relevant to tribal management. Discussion of the relevance of these shared conditions follows in Chapter Five.

In addition to staff dedication and clan-like organizational form, from the case study research and the literature, several conditions are of interest in analyzing recipes for tribal management as were described in Chapter Two. These are: high longevity of staff, proactive behavior, a hybrid organizing logic,⁸³ and highly regulated tribal citizens.

Analyzing the recipes for tribal management with these four conditions, two pathways emerge.⁸⁴ Tribes may either have high membership in longevity and proactive behavior or they may have high membership in proactive behavior and low membership in citizen regulations and bureaucratic elements. This means that for tribes that manage their own programs, if tribal employees had served a long time in the programs and the tribe in general and the program in particular are quite proactive in terms of fish and wildlife management, they manage their own programs whether or not they highly regulated their citizens or displayed stronger bureaucratic logic. However, for those tribes that did not have high employee longevity, they were proactive but did not highly regulate their citizens and did not display much bureaucracy.

⁸³ Because all seven cases had high membership in clan-like organizational logics, degree of bureaucracy was used alone as an indicator for hybrid organizing logics.

⁸⁴ Eleven possible solutions had no observations and were removed from the analyses. A threshold of one observation was used for solution inclusion.

All cases but Crow display this first recipe. The CSKT, Yakama, White Mountain Apache, Red Lake Chippewa, Fond du Lac Chippewa and San Carlos Apache programs all have many key department employees—directors, managers, biologists, and enforcement officers—who have remained with the programs for many years. Although there is variation across this condition (where fuzzy scores range from .6 to 1), these six cases are at least more in than out of membership in programs with high longevity of staff. These six cases also are highly proactive. Two cases have fuzzy scores of .6 (more or less in the membership group) and the rest have perfect scores of 1, making proactive a “usually necessary condition” (and discussed further below). These high membership scores in longevity and proactive behavior are combined with various levels of scores in the other two conditions, high bureaucracy and highly regulated citizens. The other recipe fits the Crow case: the department is highly proactive while it displays few to no bureaucratic characteristics and does not regulate its citizens’ hunting and fishing activities. Yakama, Red Lake and Fond du Lac also fit this recipe.

FsQCA analyses provide a measure of consistency which indicates the likelihood of a subset relationship between a condition or set of conditions and an outcome. Because for this analysis, the fuzzy scores for each condition are equal to or less than the outcome scores (again, tribal management is 1 for each case), the consistency measures for each pathway as well as the consistency of the overall solution is perfect. There are no cases which do not also display the outcome of tribal management, as that was the design of this research. In fuzzy-set analysis, a perfect consistency score indicates a set-theoretic relationship exists, and with consistently lower scores for the conditions than for

the outcomes, it looks like these conditions are sufficient. However, while analyzing for sufficiency will be important in analyses presented below for the survey cases and with the other variable outcomes, for this analysis sufficiency really cannot be demonstrated.

FsQCA also offers a measure of coverage, or how much of the outcome is explained by each recipe and the combination of recipes. The overall solution coverage for this analysis is .771, the proportion of memberships in the outcome that is explained by the complete solution. For the recipe with high proactive behavior and high longevity, the raw coverage is .714 and the unique coverage is .314. The raw coverage score indicates the proportion of membership scores in the outcome explained by each term of the solution. The first recipe's raw coverage indicates that recipe explains 71.4% of the membership scores in "tribal management." (The unique coverage measures the proportion of membership scores in the outcome explained by each term of the solution, taking into account that more than one solution may explain a particular case's membership in the outcome. As some paths overlap, one should not place too much importance on unique coverage.) This high raw coverage score indicates that this pathway is empirically important as it alone covers over 30% of the membership scores. For the recipe with high proactive behavior and low citizen regulations along with low bureaucracy, the raw coverage is .457 and the unique coverage is .057. This is a reflection of Crow being the single case that solely uses this recipe, while again the other three (Yakama, Red Lake and Fond du Lac) also have this combination of conditions. Again, the low unique coverage score should not be interpreted as this path having

relatively little empirical weight since it overlaps with the other path and three cases make use of both.

These results indicate several important points. First, proactive behavior is common where tribes manage their own programs; the importance of this condition will be discussed at length in the following chapter. Second, if tribes do not have employees who have been with the management departments for a long time, they also do not have highly bureaucratic organizations including highly regulated citizens. While it might be tempting to suggest that employee longevity leads to more bureaucracy and more regulation, this is not necessarily correct, as the Yakama programs have high longevity, low regulation and few bureaucratic elements.

Many of the interviewees in this study, when asked directly about what enables tribes to manage their fish and wildlife programs, gave a few common responses. Largely, they cited having steady funding, a contiguous land base and treaty rights to hunt and fish. While steady funding is, of course, always important and is an element in continuing a program (or perhaps doing it well—see analyses below), it is not an appropriate condition for tribal management as we are looking at it here, because one large grant, for example, could help start up a program and enable it to survive for a few years. Therefore, the issue of funding is reserved for discussion elsewhere. Regarding the other often cited conditions, amongst these cases, six tribes have *either* a contiguous land base or treaty-ensured rights to hunt and fish. (The important exception is the Crow Tribe who thought they had reserved these rights through their treaties, later to find the

language was originally intended and later interpreted to reserve only temporary rights.⁸⁵) Although this rigid dichotomy is in no means a dividing line for tribes across the country, for these cases this distinction makes sense in that for most tribes whose reservations were originally established by treaty, these lands were later opened up to allotment whereby some tribes lost significant portions of their land base. Two of the cases in this study (the White Mountain Apache and San Carlos Apache) have reservations established by executive order, whereby no treaty rights to hunt or fish off-reservation were explicitly protected. Off-reservation rights to hunt or fish encourage the development of a tribally-run management program in order for the tribes to ensure they can exercise their rights (i.e. there need to be fish in the waters in order to fish). These off-reservation reserved hunting and fishing rights also provide an opportunity for exerting sovereignty and authority in general. If tribes have a right to fish or hunt off-reservation, they have a right to manage those resources off-reservation as well. The WMAT and San Carlos reservations were never opened up for allotment sale under the General Allotment Act of 1887. Therefore, although their rights were very limited to certain geographical areas, their land bases remained contiguous. The exception amongst the treaty-established reservations is Red Lake, who did not reserve off-reservation hunting and fishing rights through treaty, but who also did not allow its reservation to be opened up for allotment, making it one of the two “closed” treaty reservations in the U.S.

Adding these two conditions to the initial analysis (longevity, proactive behavior, bureaucratic logic, and highly regulated citizens), we get a complex result of four recipes

⁸⁵ See Canby 1998.

whose overall solution coverage is actually less than the initial analysis (at .647).

Proactive is in each pathway. (See Table 4.1 below for the four pathways.) This condition's consistency as a superset of tribal management is .886 with a coverage of 1. We might think of proactive as a usually necessary condition, as for five of the seven cases, proactive behavior had perfect scores and for the other two cases, the scores were still more in than out of a fully proactive set with scores of .6 each.

Taking proactive out of the analysis, nothing changes: we continue to have four pathways in this solution with the same overall solution and consistency as well as the same individual coverage and consistency scores as was the case when proactive was included. This occurred because although there was variation in the condition measures for proactive across the cases, for the cases with lower proactive scores, there were even lower scores on other conditions in the analyses. Because fsQCA takes the minimum membership score in a combination of conditions, in this analysis the presence of proactive made no difference on the results.

Interestingly, in none of these analyses is high bureaucracy important. Some pathways include the absence of bureaucracy while for others its presence or absence is irrelevant. This suggests that while these cases are all hybrids of clans and bureaucracies to some extent, the variation in their levels of bureaucracy is not significant.

Table 4.1 FsQCA Complex Solution for Tribal Management

<p>LONG*PROACTIVE*bureau*LANDBASE*treatyright+ LONG*PROACTIVE*memreg*landbase*TREATYRIGHT+ LONG*PROACTIVE*MEMREG*LANDBASE*treatyright+ long*PROACTIVE*bureau*memreg*landbase*treatyright</p>

Analyzing the conditions we have remaining—longevity, land base, treaty rights and citizen regulations—we get three recipes for tribal management. Three cases (White Mountain, Red Lake and San Carlos) share the recipe high longevity, highly contiguous land base and the absence of treaty rights. The raw and unique coverage for this recipe is .2854. Three cases (CSKT, Yakama and Fond du Lac) share the recipe high longevity, low citizen regulations, low land base and explicit treaty rights and this recipe's raw and unique coverage scores are also high at .3044. The seventh case—Crow—has low or absent membership in all four conditions and continues to be something of an anomaly in this study. This is reflected in the fact that the raw (and unique) coverage for this recipe is very low at .0840. While that particular case stands out, the other pathways support the analyses above in that they have high longevity and either a contiguous land base or treaty rights. It is perhaps of note that those tribes with treaty rights have low citizen regulations, while those without treaty rights are mixed in how much they formally regulate their citizens—the two tribes whose reservations were established solely by executive order highly regulating their citizens and the two treaty tribes not as regulating.

Thirty-six survey cases

Unlike for the case study tribes above which were selected *because* they manage their own fish and wildlife programs, tribes represented in the survey vary on whether or not they have their own programs. Of these 36 cases, 31 completely manage their own programs. Of the other five cases, three are run entirely by the state: wildlife on tribal land as well as tribal citizens' activities fall under state jurisdiction. Two others manage fish and wildlife programs and regulate tribal citizens, but the state regulates and

manages non-tribal citizens as well as regulates fish and wildlife on non-tribal land within the reservation boundaries. Although hard numbers are unavailable, this proportion of tribal to state management seems to reflect the national population of tribes.⁸⁶

Because the surveys were administered at an annual meeting of the Native American Fish and Wildlife Society, all tribes represented in the surveys are interested at least to some extent in this kind of fish and wildlife management. However, on all conditions these cases vary more widely than do the case-study cases. Looking at pathways to tribal management, three conditions are incorporated into the first analysis to reflect the analyses above for the smaller group of case-study cases. These conditions are a contiguous land base, a treaty-established reservation, and highly regulated citizens.⁸⁷ Due to the complexity of such conditions as proactive behavior, clan organizational form and the longevity of staff, data on these conditions were not collected in the surveys and therefore are not analyzed for the thirty-six survey cases.

None of these three incorporated conditions is necessary (determined by looking at an XY plot and then doing a test for necessity) and therefore all remained in the analysis. Using a frequency threshold of three cases, a consistency cutoff of .95, and the most complex solution, three pathways emerge: a highly contiguous land base and few citizen regulations; a reservation established originally by treaty and few citizen regulations; or a highly contiguous land base and a reservation originally established by

⁸⁶ This estimate is based on personal communications with Bob Gartner, head of the BIA fish and wildlife department and Ron Skates of the U.S. Fish and Wildlife Service in Montana and longtime leader in the NAFWS.

⁸⁷ Remember from Chapter two that this measure is used as a proxy for treaty-ensured rights to hunt and fish.

treaty.⁸⁸ The consistency measures for each pathway were high, respectively, 1.0, 1.0 and .9680 indicating there is most certainly a subset relationship between the sets of conditions and the outcome, tribal management. The pathways' raw coverage measures were .2294, .2671, and .3746.⁸⁹ The overall solution consistency was .9783 and the coverage .5579. Therefore this set of pathways is a subset, and it explains over half of the outcome.

Although many interviewees cited having a contiguous land base as an aid in helping establish tribal management programs, sheer land base size may also play a part. When tribes control larger areas of land they may be better able to wield more weight with the state and federal governments. Adding this fourth condition to the analyses, three pathways to tribal management emerge.⁹⁰ The first pathway involves having a large land base and owning most of the land within this base (having a large, contiguous land base).⁹¹ For this pathway consistency is .9749 and raw coverage is .4829. The second path includes having a large land base and the absence of a treaty as well as low citizen regulations. The consistency for this path is 1.00 and the raw coverage is .1298. As for the first path, this path is also a subset of the outcome; however its relevance is much lower than that of the first path. The third path involves the absence of a large land base, low tribal citizen regulations and the presence of a treaty. The consistency for this path is

⁸⁸ Using a frequency threshold of three, over 86% of the 36 cases remain in the configuration.

⁸⁹ The respective unique coverage scores were .1078, .0755 and .1830, lower than the raw coverage scores indicating overlap in the paths.

⁹⁰ Both the XY plot and a necessity test indicate that a large land base is not necessary for tribal management; however, this is also intuitive; plenty of tribes with small reservations manage their own programs.

⁹¹ For this analysis, the frequency threshold was lowered to two, as with a threshold of three, only 26 cases remained in the configuration, a proportion of 72.22%. With a threshold of two, the proportion increased to 83.33%. The consistency cutoff remained high at .95.

also 1.0 and the raw coverage is .1512 indicating a set-relation, but low condition relevance.⁹²

The first pathway indicates that having a lot of land over which a tribe has control is one way to manage your own program. The second and third paths emphasize the importance of retaining potentially protected treaty rights *or* a large land base. In terms of coverage, clearly the first of these three paths is the most relevant to explaining tribal management; having a large land base, most of which is controlled by the tribe, is consistent with anecdotal explanations for tribal management. The degree of regulation over citizens is absent in the first path and low in the last second and third paths, suggesting this is not an important condition in tribal management. This finding about the condition of citizen regulation is consistent with the case-study fsQCA analyses above wherein high formal regulation of tribal citizen hunting and fishing activity does not seem to be relevant for tribal management. The overall solution consistency is .9805 and the coverage is .6248, strong evidence of a set-theoretic relationship and the set of pathways being highly relevant to explaining tribal management.

2. Fish and wildlife population health

Now that we understand what the recipes for tribal management look like among these tribes, let us turn to the more varied outcomes regarding the effects of tribal management. One obvious measure of the success of management is the health of the fish and wildlife populations. While it is quite technical to designate the specific health of any particular species, it becomes extremely complex to incorporate an entire

⁹² The three unique coverage measures were .3439, .0430 and .0989 respectively.

ecosystem's worth of species. Furthermore, not only does the researcher not necessarily have access to these data, the tribal managers themselves in some cases do not have access—or these data do not even exist. Nevertheless, a very clear sense of healthy or unhealthy fish and wildlife populations overall can easily be determined by speaking to anyone who works with or avidly hunts or fishes these species. In the course of multiple conversations and interviews on this topic of population health, I found a high degree of consistency in responses within single cases. Survey respondents were consistent within cases in their responses to questions of health as well.

Seven cases

Within the case study cases, general assessments of the health of the resources were consistent, and this outcome has been coded dichotomously to reflect these positive and negative assessments. For six cases, the overall assessment of fish and wildlife population health was positive. For the seventh case, the Crow, it is widely acknowledged that the health of the wildlife is less than ideal if not actually in a state of emergency. From the research and literature, conditions which were expected to be present (and perhaps high) where we find healthy fish and wildlife populations were the following: high longevity of staff, a hybrid organizing logic, highly regulated citizens, good tribal-state relations, a strong cultural match between the institutions and the cultural practices regarding fish and hunting, fish and wildlife department control over the revenue, and tribal management (the outcome from above).

The analyses for tribal management above with the seven cases positive on the outcome allowed us to look for recipes to that outcome. With only one case being fully

in the group of cases with wildlife with poor health, fsQCA is less useful. In lieu of performing analyses that would only loosely offer us an explanation, regarding the health of the wildlife population, it is more appropriate to closely examine the one case whose wildlife has poorer health.

While the Crow case was discussed in Chapter Three, here we will pull out some factors that are specific to the health of the populations. The most obvious condition of the Crow program in relation to population health is its absence of biologists on staff. In fact, not only does the absence connect to the health of the populations, it connects more immediately to the absence of clear, documented, long-term understanding of the health of the populations. All other tribal programs in the case studies had their own wildlife and/or fisheries biologists (although San Carlos lost theirs for personal reasons at the end of the study period). Other matters of organizational form that relate to the health of the fish and wildlife populations for the Crow are discussed in the following chapters.

Thirty-six survey cases

The survey was not intended to measure the complex conditions of bureaucracy, tribal-state relations or the degree of a cultural match between the tribal norms and the managing institutions discussed for the seven cases above. Therefore this analysis looks at different conditions for pathways that might result in healthy populations.

Focusing on the pathways among this larger set of cases, the following conditions were analyzed: having highly regulated citizens, having adequate funding, tribal management, and excellent ability on the part of the tribal court to prosecute fish and wildlife violations. Of these conditions, the XY plot and necessity tests indicate that

tribal management is almost always necessary, but not sufficient, for healthy fish and wildlife populations (with a consistency of .9415 and a coverage measure of .9001). Indeed this reflects the literature on the success of programs for tribes in general. If it is not a program run by the tribe, it will not be successful or sustainable. None of the other conditions are necessary for healthy fish and wildlife populations.

With these four conditions, a frequency threshold of three cases, and a consistency threshold of .95, we get a complex solution of two paths.⁹³ The first pathway consists of tribal management, highly regulated citizens and inadequate funding. This path has a consistency measure of .9414 and a raw coverage of .4954. The second pathway consists of tribal management, excellent ability on the part of the court, and inadequate funding. The consistency measure is .9683 and the raw coverage is .3472.⁹⁴ Together this set of pathways has an overall consistency of .9491 and a coverage measure of .5755—again a strong indication of a set-relationship with large coverage of the outcome by the set of paths.

Although 28 of the 36 programs have tribal biologists on staff, this proves to be neither necessary nor sufficient for healthy wildlife populations and does not add to the consistency or coverage of analyses with the above conditions.⁹⁵ This may be because strong regulations on tribal citizen activity or strong court ability to handle fish and wildlife code violations might be sufficient enough to mitigate harmful (human-caused) effects on fish and wildlife populations. We would expect that where non-human threats

⁹³ With this frequency threshold, we have 86.11% of the cases remaining in the configuration.

⁹⁴ The unique coverage scores are .2284 and .0801 respectively.

⁹⁵ In fact, analyses including a condition for biologists reduced the proportion of cases in the configurations too low to consider meaningful.

to wildlife are present (such as disease or newly introduced predators), citizen regulations and court ability would have less of a positive impact on populations than would biologists.

Adequate funding is a sufficient condition for healthy fish and wildlife populations, as can be illustrated by a simple XY plot. However it is by no means necessary, as can be seen in the analyses above where tribes with healthy fish and wildlife populations in fact do not have adequate funding. No other conditions are entirely sufficient. Strong court ability is usually sufficient, but clearly this would only be the case if those activities that were legal were also good for the fish and wildlife populations.

Doing an fsQCA analysis with the survey data for an outcome of unhealthy wildlife populations does not make much sense. No configuration meets even low consistency thresholds, indicating there is not likely a subset relationship between the conditions and the outcome.⁹⁶ We do find that two conditions are important in terms of necessity when looking at unhealthy populations: inadequate funding (the negation of adequate funding) is necessary with the XY plot confirming a necessity test in which the consistency measure is 1.0 and the coverage is .1778. Therefore, while inadequate funding is necessary for unhealthy populations, it is not that relevant. Poor ability on the court's part (again the negation of excellent court ability to handle fish and wildlife matters) is almost always necessary; the XY plot shows that for only two of the 36 cases, poor court ability has a lower score than for the score for unhealthy populations. This is

⁹⁶ The highest consistency measure for any configuration was .58.

confirmed with a necessity test in which the consistency measure is .9329 and the coverage is .2282. However, neither of these conditions explains much of the outcome, and the analysis is even more irrelevant.

3. Significant revenue

Seven cases

This is the outcome with the most variation (among the seven case study cases) coded with fuzzy membership scores in the membership set of significant revenue earned. Conditions of interest include high staff dedication, high longevity of staff, a hybrid organizing logic (measured by degree of bureaucracy), highly regulated citizens, tribal jurisdiction over non-citizen hunting and fishing, tribal management and healthy fish and wildlife resources (the last two being the outcomes in the previous analyses).

For significant revenue four conditions are clearly necessary: high dedication, strong clan logic, tribal management and tribal jurisdiction over non-citizens. These conditions all fall in the lower right hand half of an XY plot and tests for necessity revealed perfect consistency scores (1.0) and high coverage scores (between .714 and .926). These necessary conditions are excluded from the analyses, but an in-depth discussion of these conditions' importance follows. A healthy population is also almost always necessary; its consistency is .920 and its coverage measure is .767. With the remaining conditions, we get one pathway.⁹⁷ This pathway is a combination of high employee longevity, high citizen regulations, and a healthy fish and wildlife population.

The White Mountain Apache and San Carlos Apache take this path with .833 for

⁹⁷ The frequency cutoff was 1. The consistency cutoff used was .8182; no analyses had configurations with consistencies above .83.

consistency and .400 as the unique and raw coverage. The overall solution consistency and coverage are the same, of course. The other cases are covered by the necessary conditions left out of the formal analyses.

Aside from the necessary conditions which are discussed further below, we might reason that having highly regulated citizens could contribute to significant revenue gain because citizen regulations might allow more game to be available to non-citizens who will pay for their activities. However, the condition healthy population might be measuring the same thing. Taking the condition highly regulated citizens out of the analyses, we slightly improve the consistency and coverage with scores of .846 and .440 respectively.

It is notable that level of bureaucracy again does not seem to matter in these pathways.

Thirty-six survey cases

For the survey cases, rather than the outcome being a measure of significant revenue produced by the programs, survey respondents were asked if their programs generated revenue at all. (The significance of revenue generation is too complex and perhaps too often contested to be addressed in the survey.) As was the case for analyses for the above outcomes, staff longevity and bureaucracy were also not measured for the survey cases. For these analyses the following conditions were included: highly regulated citizens, tribal jurisdiction over non-citizen hunting and fishing, tribal support for the fish and wildlife programs, and healthy fish and wildlife resources (the last condition being the outcome in the previous analyses).

Tests for necessity as well as XY plots indicate that tribal jurisdiction over non-citizen hunting and fishing is a necessary and highly relevant condition for revenue (with a consistency score of 1.0 and a coverage score of .9032). That this condition is necessary is not too surprising, for if tribal hunting and fishing programs have large revenue, it comes from larger tag, permit and trophy fees charged (or sometimes auctioned off) to non-tribal citizens than for tribal citizens. However, because this outcome is earning revenue generally—not necessarily *significant* revenue—it is interesting that revenue from tribal programs which charge their own citizens does not decrease the importance of non-tribal citizen-generated revenue. Twelve tribal programs charge citizens for fishing activities and fourteen charge citizens for hunting activities. Additionally, some programs do not allow non-citizen hunting and/or fishing. No conditions are sufficient for revenue.

Excluding the necessary condition, with the remaining conditions of highly regulated citizens, tribal support and healthy populations, we get one path to revenue.⁹⁸ Strong tribal support for fish and wildlife programs combined with healthy fish and wildlife populations is the path to revenue generation. The consistency for this path is .8187; while lower than most in these analyses, this consistency score is still high enough to suggest a subset relationship, although this argument rests on less solid ground than if there was a perfect consistency score. This means that almost 82% of the membership scores in this path are less than or equal to the membership scores in the outcome of

⁹⁸For these analyses, a lower consistency cutoff was used. After a frequency cutoff of three cases, the three remaining configurations had consistencies of .809, .803 and .766. Using this break in distribution, a consistency cutoff of .800 was used.

revenue. The coverage score is .6935 indicating that this pathway explains a large proportion of the outcome.

These analyses suggest that revenue is coming from having the authority to charge non-citizens for hunting and fishing activities. That tribal support and healthy populations are important for generating revenue also relates to non-citizen activities. Tribal support for fish and wildlife programs supports the capacity-building for the tribal programs. Without tribal support, tribal programs likely lack access to funding through the tribal government (even if these are federal funds appropriated to the programs through the tribe). Furthermore, if tribal government does not support the programs, the program staff members are not likely to be able to fully act in the best interests of the program. Additionally their time and energy may be spent trying to gain the support of the tribal officials or tribal citizens, rather than on developing a program. If tribal citizens themselves are not supportive of the fish and wildlife programs, they might be less likely to follow fish and wildlife regulations (thereby potentially depleting the resource that would be the source of revenue) or vote for funding these programs. Tribal support may also mean supporting the specific public hunting or fishing programs that generate revenue from non-citizens; without tribal support for these programs, they are less likely to be implemented or if implemented they are less likely to be successful.

Healthy fish and wildlife populations are also important for revenue. Reputations for healthy fish and wildlife populations are attractive to non-citizen hunters and fishermen who likely travel to engage in these activities on tribal land. Certainly the image of a healthy population, combined with deliberate marketing of this image, is what

attracts hunters and fishermen who pay the most for an exceptional sporting experience. (Remember that this may mean up to \$30,000 for a trophy bull at San Carlos, for example.) Healthy wildlife populations are also necessary for the sustainability of the revenue-generating resource. Although the health of a particular species population may be determined to be fine at one point in time, if that revenue generation is to continue, the populations must be sustained.

CHAPTER FIVE: IMPLICATIONS

Clearly some conditions matter more than others for tribal management of fish and wildlife, and these conditions matter in context. Of the findings from the fuzzy-set qualitative comparative analysis, it might be most useful to think of these conditions as falling into two categories. There are conditions tribes can control without external collaboration based on their own internal capacity to self-govern, and there are conditions for which tribes need to be skilled and effective at operating in the larger world beyond the tribe through intergovernmental relations, public relations and so on. Each of these categories requires a different approach to governance.

Below, I consider key conditions independently. I follow these with a discussion of the conditions in context.

1. Conditions tribes can control

Most of the conditions significant for tribal management, healthy populations, and program revenue are conditions over which tribes exercise considerable control. This is not to say that these conditions are entirely removed from cultural, economic and political happenings outside of the tribe, but rather that the primary forces that may shape these conditions rest within the tribes themselves.

Proactive Behavior

Proactive behavior is significant for tribal management. This condition refers to tribes being assertive in the natural resources arena, including working towards increased management control of fish and wildlife programs, pushing jurisdictional boundaries,

setting clear strategic goals that move management beyond past practices or conditions (e.g. improving revenues, improving population or ecosystem health, incorporating cultural concerns, etc.), and moving beyond crisis management. While we do not know if some proactive tribes are not managing their own fish and wildlife programs, we do know that those who manage their own programs tend to be highly proactive. Among the case study cases, this condition was present in all pathways to tribal management. (It was not measured among the survey cases.) One tribal chairman described his efforts at being proactive as an attempt to exercise sovereignty in an offensive position. He argued that too often claims of sovereignty are invoked as a defense during a governance crisis. Rather, a tribe must exercise sovereignty proactively. That proactive behavior is necessary for tribal management is not surprising. For a tribe to manage its own program, it must take the initiative to do so. State governments are more than willing to manage tribal resources if given the opportunity. Yet even when the state or federal government has not stepped in, tribes must act (in contrast to *react*) in order to oversee programs. Many tribes would like to have their own programs, but have not sought the responsibility; consequently there are tribal lands where no tribal management is in place despite intensions and legal opportunity.

Proactive behavior is not sufficient for tribal management, however, as tribes act within varying legal contexts and with varying resources, among other conditions. For proactive behavior to be a condition of tribal management among these cases, it must be engaged in combination with longevity of staff, or with the absence of highly regulated tribal citizen hunting and fishing and the absence of a strong bureaucracy. Both of these

sets of combinations make intuitive as well as theoretical sense. Proactive behavior might be combined with longevity of staff because staff who have been with a particular program for a lengthy period of time more likely better know the kinds of risks that are acceptable and those behaviors that have the likelihood of succeeding—whether that is with the tribal government, the tribal citizens or other non-tribal governments or public.⁹⁹ Additionally, few citizen regulations may accompany proactive behavior, because few regulations would naturally accompany minimal bureaucracy. And proactive behavior might be difficult to engage in if one is stifled by a strong bureaucracy, designed to make organizational behavior consistent, predictable and rational. Many examples of proactive behavior among these cases involve engaging in activities or practices that may not be predictable. For example, the Crow natural resources department has increasingly assumed law enforcement and other public safety responsibilities normally seen as outside the realm of fish and game. During a major snowstorm in the spring of 2007, they took charge of a temporary shelter for travelers stranded on the Crow reservation. Other examples of proactive behavior involve taking risks that may not be perceived as particularly rational. For example, a former Yakama fisheries director described a councilman approaching him during the heated days of the Boldt decisions: “The councilman said, ‘Do you know anybody in a sport steelhead club?’ I said, ‘Yeah.’ And he said, ‘I want you to call up the worst one you can think of and the worst club and I want you to get on the agenda.’” At the sportsman’s club meeting, the director describes the councilman’s assertiveness: “[He] gets up and he looks them all in the eyeball for

⁹⁹ Keep in mind that the inverse is also logically possible, that is, that longevity could lead to stasis rather than to proactive behavior. However, there is no evidence of this relationship among these cases.

about five minutes and finally says, ‘I came here to give you one message. I don’t care whether you like us. I don’t care whether you believe in treaty rights. It doesn’t make any difference to me. I came here to tell you one thing. Either we’re both going to have fish or neither one of us is going to have fish because the people who don’t care about the fish like nothing better than for you and me to be fighting.’ Clearly this took some assertiveness that is not easily identifiable as a rational bureaucratic move.

Proactive behavior can be fostered through strategic planning: identifying tribal goals—beyond the natural resource arena—and purposefully planning for their attainment. Years of research coming out of the Harvard Project on American Indian Economic Development and the Native Nations Institute demonstrate the importance of strategic planning.¹⁰⁰ Through strategic planning, tribes have the opportunity to look at both short-term needs as well as long-term visions for the tribe and its citizens. It is an opportunity to guide governmental policy and action down an integrated, intentional path. It is also an opportunity to assess various options for meeting tribal needs and to weigh the potential benefits and risks of each course of action. This enables the tribe to anticipate certain potential outcomes and to work towards those that are most desirable. The converse is the all too common situation in which many American Indian tribes find themselves, that is, operating in a continuous crisis mode. Certainly, most if not all tribes operating under such circumstances would choose otherwise. With multiple challenges in political, social and economic arenas, for example, many tribes must address the most immediate needs. This also makes them vulnerable to others setting the agenda for the

¹⁰⁰ For example, see Harvard Project on American Indian Economic Development 2008; Jorgensen 2007.

nation: rather than seek out funding and partnership opportunities that support the tribal visions for their own future, tribal leaders and others are encouraged to apply for funding and opportunities that seem most attainable in the immediate. With strategic planning, tribal leaders and managers may act in a way that supports an overall vision for the tribe, rather than react to immediate needs or funding opportunities in a way that does not support this vision and perhaps sacrifices long term success for short term solutions.

Longevity of Program Employees

The longevity of staff members is a key condition in tribal management as well as in earning significant revenue. Additionally, longevity is a shared condition for all the (case study) cases that have healthy populations. This condition refers to the length of time current tribal fish and wildlife staff members have been employed with the fish and wildlife departments. As mentioned above, longevity combines with proactive behavior and low citizen regulations in one recipe for tribal management, providing the opportunity for longtime employees to be proactive and perhaps more likely successful when doing so. (If staff members are there for a long time, but only maintaining, at best, this is not effective). Longevity is also common in all paths to tribal management for tribes with larger land bases and treaty rights, among the case study cases.

For significant revenue, high employee longevity is accompanied by high citizen regulation and a healthy fish and wildlife population. Particularly regarding revenue generation, directors of the most lucrative programs in this study talked about trial-and-error in their work. Creating innovative ways to develop lucrative programs brought some element of risk-taking which requires an understanding of the risks one takes.

Furthermore, once a program started something successful, a series of tweaking followed that developed the program into a long term success. The ability to understand what risks are acceptable (and what risks will be approved by the government and the citizens) requires experience. Additionally, the process of developing and then tweaking simply requires time.

Furthermore, longtime staff members have an historical perspective, and therefore likely a broader perspective as well, regarding tribal management. Their experience may pay off in terms of navigating the tribal political system. It is also likely to benefit relationships with outside agencies. If county, state and federal counterparts have a constant tribal contact, there is opportunity to build trust in these relationships as well as perhaps establish the tribal program as more legitimate in the eyes of the outside agencies. For tribal departments that are less bureaucratic and do not keep much of a paper trail, institutional memory may be housed solely in the individuals that have worked in the departments for years.

Employee longevity is in part tied to governmental structure. As Cornell and Kalt (1992) have found at Crow and elsewhere, a general council—in which every eligible tribal citizen serves as part of the decision-making body—is not usually the most efficient or effective governing structure. The Crow natural resources department employees consider themselves to have completely started over in 2001 when a new chairman was elected and therefore a new department director was appointed who consequently hired the new staff. Some conservation officers were rehired and have worked for the department off and on for literally decades. However, directors and other staff have

come and gone, and with them a lot of information about ‘trials and errors’ of the past that help shape the department at any one time (in other words, lessons seem not to be easily passed along). The director himself had little information to share with me about the beginnings or history of the program and had little idea where one would find that information. Although there were varying degrees of bureaucracy among the case study cases, none were high. Classic Weberian analysis would say bureaucracy is protection from effects of high turnover; people are interchangeable. But if people don’t change, formal rules become less and less important. Longevity among many key employees in these programs might explain to some extent why formal rules are less important.

Tribal leaders and department directors have options for encouraging longevity and might do service to their programs by supporting employee retention. Longevity can be encouraged through employee retention measures. Additionally a civil service code outlines the conditions and processes through which an employee may be let go. This gives employees reassurance that their jobs will not disappear on a political whim, but rather that there are legal and appropriate means through which they can expect a fair hearing concerning any accusations of wrongdoing.

Virtually all tribal fish and wildlife programs would like to have their programs staffed entirely with tribal citizen. Having said this, most of those I talked with would never consider replacing their longtime, dedicated and effective non-tribal employees at this time. To varying degrees, the case study cases were able to fill their programs with tribal citizens. Typically, this goal is voiced as a vision for the future, as more tribal citizens become qualified to work in natural resources. If retaining non-citizen

employees is also of value—which it clearly is among the cases in this study—in addition to a civil service code and other retention tactics mentioned above, longevity can be encouraged through contracts that clearly outline the expectations of the tribe regarding matters of citizen-employee preference. (If they do not want non-citizen employees, they may do well to support up and coming tribal citizens in getting the experience and education—and interest—needed to join their departments.)

Both tribal citizen and non-citizen employees were represented among the long-timers. For the group of ten CSKT conservation officers (all tribal citizens), there is over 250 years of experience, with one officer having served 33 years in the department. The Division director (a tribal citizen) began over 25 years ago and the wildlife program director (who is not a tribal citizen) began about the same time. The director of the WMAT wildlife and outdoor recreation department has had over 30 years with the Tribe (and he is not a citizen). At San Carlos the chief game warden (a San Carlos Apache citizen) is the only officer who gets the weekends off—although he is the first on-call in the middle of the night. This privilege comes with his years of experience. He has been in law enforcement with the tribe for 33 years. The San Carlos criminal investigator started with the Tribe before the chief did. At Fond du Lac, although the biologists are fairly recent hires, beginning in 1993, the chief game warden was the first conservation officer for the tribe, also 33 years ago. Speaking of his experience, the biologists said, “He can probably tell you who shot a deer here and when they shot it and the whole thing. [He] is an encyclopedia of knowledge about Fond du Lac reservation. He can tell you just about anything that you want to know about the reservation.” At Yakama the

(non-citizen) wildlife biologists are all going on 20 years with the department, and the former (non-citizen) fisheries manager was in that position for 22 years before leaving the department.

Although by no means had every employee in every program served many years in their departments (and indeed thank goodness—new employees and up-and-coming leaders are necessary), every program but the Crow Natural Resources Department had impressively long-tenured staff, despite the small size of many of the departments. A few of the conservation officers at Crow had worked for the department many years, but their positions were not continuous as they would lose their jobs with leadership changeovers and perhaps regain them at a later point in time.

Employee Dedication

Highly dedicated staff members are almost always necessary for tribal management, and they are always necessary for these tribes to earn significant revenue through their fish and wildlife programs. Dedication includes the willingness of employees to donate their passions, finances or time beyond the expectations of their work positions, or to work for little pay or recognition when more lucrative options are available. Tribal citizen employees referenced the greater good and greater goals they felt they supported by working for these programs; they were passionate and clearly dedicated. For example, a former director of the Crow Natural Resources Department described his efforts at getting the first fish and game code passed, and laughed as he recalled his tactics: “I’m not a lawyer, I’m not a genius, but I tried to get people that know all of that together [to write the code]; that’s why when I got it going, it took me

four years to finally get that passed. It was shot down from the council five times, but I said, 'I'm not going to give up.' I kept going, got another version going—sometimes we just changed the wording or the heading.”

For tribal citizen employees, their work was also very personal. The natural resources director at Crow said,

I'm trying to protect my people as well as the species that we have here. That's where we are heading... We've been pushed around as Native Americans and as long as I am here, I'm going to put my foot down and to the best of my ability I'll stop that and tell them that this is our land and we will protect it. And if I go outside the reservation, I abide by their laws and if they come into the reservation I want them to abide by our laws.

Another tribal citizen talked about the intimate connection between land and identity. He said,

For me, it's as simple as a name. My grandfather gave me an Indian name which was from one of his ancestors who had earned this name as a young boy hunting bison on the plains of Montana. So hunting bison on the plains of Montana is part of my identity. Without that, my Indian name kind of becomes ancient, meaningless. It's not current. It's always lost somewhere in the past. My granddaughter's Indian name is tied to a particular place in the mountains of Idaho. Without that place, her name becomes meaningless. So it's a part of culture, but it's also a part of identity.

Others talked about there being no such thing as “off-duty” as a public servant, but that the work was exceptionally gratifying.

Non-citizen employees also talked about the greater good and larger achievements for the tribe. Usually they spoke of this in a less personal way than the citizen employees, although how they talked about their work was personal: one former (non-citizen) director who has not worked for the tribe for five years still referred to the tribe as “my tribe,” and this particular director estimated that he had donated over five years of

unpaid work to the tribe throughout his 20-plus years of employment with them. The WMAT director also talked about his personal investment in the success of the programs. He said, “I feel a large part of the program, over the years, is a reflection on me, that when the hunter comes in, that he gets a very good guide that knows what he’s doing. Be able to talk to him. Show him around the area and have a great time. It’s just a reflection on me, too, so I have a personal interest to make sure it happens.” The non-citizen employees attributed their happiness in their positions to being able to “be a scientist with a heart,” something they felt they could not do by working elsewhere, even for more money. The Yakama director of the wildlife program spoke of his non-citizen biologists:

My goal someday is to have 100% Yakama enrolled citizens working for me. And my biologists know that and they’re fully supportive of it. Most of them have been here for 18 years so they’re ready to either retire or move... They fully agree and understand. And when I first got this job five years ago, that’s what I told them. I was upfront with them. That’s how devoted and dedicated they are to making sure that things are done right for our people. That was one of the first things I found out, or wanted to find out, and that’s how I found out who was really dedicated. Those that weren’t, before one year was up, they left. And I knew the ones that are here now that you’ll be meeting, you’ll see how devoted and dedicated they are. They’re just almost ready to be enrolled Yakamas, not quite. They’re that close. They’re that devoted, so they wouldn’t want to work anywhere else and you’ll find out.

I did find out. The head wildlife biologist at Yakama told me, “Every white guy working here, one of their goals is to train their replacement tribal member.”

This dedication involves reports of 18-hour workdays for conservation officers, and countless weekends and evenings for directors and managers. Many biologists do not keep track or bill for extra hours. At Crow, in the past game wardens have occasionally not been paid, but have continued working. A former Crow director, turned conservation officer in his ‘retirement,’ said, “We try to take care of that best to our

funding and sometimes we don't get paid but we still keep doing it.... Well, they get paid now, but at the time when I was there [as director], no, we didn't have enough money to pay them but they voluntarily done it, the officers did." At the WMAT, pay for conservation officers is so low that some are on federal assistance and many use their own horses for work. Yet one officer said "I love this place. I will never leave it...It is a beautiful place. Even if somebody offered me a large amount of money to go work for [another] department, I don't think I would leave." The chief warden echoed this when I asked him what made people stay; he said, "I think is what it comes down to is the love of the land. And we have been working close together with each other and, you know, my turnover rate is probably zero." At San Carlos, the chief conservation officer with nearly three decades of experience under his belt takes the night-shifts on weekends so that his officers can rotate weekends off. Tribal programs can generate a lot of good will through organizing like this, saving considerably on labor costs.

Although dedication may appear to be a super-group of longevity (i.e. for the most part, only dedicated staff stay around in many of these difficult and underpaid positions), longevity and dedication serve different purposes in clans and bureaucracies; these distinctions will be discussed in the following chapter focusing specifically on governance structures.

Tribal Citizen Regulation

As a condition of fish and wildlife management, tribal citizen regulation refers to the extent to which tribal citizen behaviors related to fish and wildlife are formally regulated. This formal regulation ranges from virtually none—where the fish and

wildlife code states that citizens may not shine spotlights on wildlife but can otherwise harvest as much of whatever, whenever—to highly restrictive, where seasons and harvest levels are very limited and tribal citizens must pay for licenses and tags. The effects of the degree to which citizens are formally regulated are less straightforward than those for the above conditions. Highly regulating tribal citizen activity seems to work well for some programs for some outcomes while regulating citizens less strictly works for other tribes for other outcomes, and this importance depends upon the context. For tribal management, low citizen regulation is a condition of many paths, in combination with proactive behavior and low bureaucracy; high longevity, treaty rights and a noncontiguous land base; a contiguous land base; a large land base; and so on. Interestingly, outside of tribal management as an outcome in which *low* citizenship regulation sometimes has an effect, for healthy populations and program revenue it is the presence of *high* citizenship regulation that sometimes has an effect. Given all these possibilities, it should not be surprising that the degree of citizenship regulation is neither necessary nor sufficient for explaining any of the outcomes of interest.

High regulation is combined with longevity of staff and healthy fish and wildlife populations as the sole pathway to significant revenue among the case study cases. Highly regulated citizens (who are highly compliant with the regulations) contribute to the health and abundance of the fish and wildlife populations, which are in turn the source of revenue for non-citizen sportsmen who come to fish and hunt on the tribal land. High regulation also combines with tribal management and the absence of adequate

funding in a recipe for healthy fish and wildlife populations, perhaps for the same reasons.

If anything, the various ways in which regulation can combine with other conditions in meeting outcomes suggests that the rationale for and effectiveness of regulation are specific to the situations of each individual tribe, and the decision regarding degree to which tribes formally manage their citizens is a complex one that each tribe must make for itself. In some places, cultural hunting and fishing norms are as explicit as are codified hunting and fishing regulations and may in fact have a higher compliance rate. In other places, the absence of formal regulations is due to the assumption that cultural norms are sufficient to the regulatory task or that cultural norms are in fact in place; in these cases, it is important to evaluate whether or not these assumptions are accurate.

The extent to which formal regulation is effective in regulating tribal citizen behavior is tied to the capacity and efficacy of other tribal institutions such as law enforcement, the judicial system, any fish and game committees or boards, and the tribal government. However formal regulations may serve other purposes for which compliance, enforcement and adjudication are relatively unnecessary matters. Tribal citizen regulations may provide benefits separate from controlling or monitoring tribal citizen behavior. Among the case studies, it appears that written regulations may promote program legitimacy for other non-tribal organizations such as county or state government as well as for non-tribal citizens who may live or recreate on the reservation (for a poignant discussion of the legitimating effects of tribal codes and tribal courts, see

Nesper 2007). This potential function of citizen regulations is discussed further in the following chapter.

Efficacy of the Tribal Court

In this study, the tribal court's ability to handle matters of fish and wildlife violations is assessed in relation to the health of the wildlife populations. Strong court ability is found to be significant in one recipe (of two) for healthy populations in combination with tribal management of the programs and the absence of adequate funding. There is also some indication that poor court ability is also almost always necessary for unhealthy populations. On average, survey respondents who had tribal courts rated their court's ability as 2.1 on a Likert scale from 1 to 5 (where one is the poorest and five is the best). This low average rating was accompanied by comments (unsolicited in the survey form) including "[the] problem is no citations of infractions, lack of motivation, negligence of duties," "most [offenders] walk" and "[I'm] not aware of the conservation officers catching anyone in years." Although no neutral or positive comments were made about the tribal courts, four programs did give their court a score of 4 or higher.

A large body of research from the Harvard Project on American Indian Economic Development, the Native Nations Institute, and others have studied the important role that tribal courts can play in nation building, including strengthening sovereignty, promoting economic development, empowering other governmental branches, promoting peace and community health, etc (see Flies-Away, Garrow and Jorgensen 2007; Harvard Project 2008; Skari 1992). The key, though, is not simply for tribes to have tribal courts but to

have tribal courts that are *effective* at promoting these facets of nation building (Harvard Project 2008). When the court is at least fairly effective in handling these fish and wildlife matters, it compensates for lack of funding in contributing to healthy populations.

Tribal Support for Fish and Wildlife Programs

Tribal support refers to the degree of support provided by the tribe or its citizens to the fish and wildlife program. This includes not only making the fish and wildlife programs a priority, but also supporting them with appropriate decisions about resources and hiring and retaining effective managers. In this study tribal support was assessed in relation to revenue from the fish and wildlife programs. For the survey cases, strong tribal support is found in combination with a healthy population in the only pathway to earning revenue. Survey respondents rated tribal support for their programs on a scale from 1 to 5 (with five being the strongest support) with an average of 3.2. The connection between tribal support and revenue is probably multi-faceted. When tribal citizens and tribal governments support fish and wildlife programs by providing overall strategic direction and practical resources without directly interfering in program management, the program staff can spend their time and energy on developing lucrative programs (if that is a goal) rather than on battling tribal councils or focusing on law enforcement to handle citizen non-compliance (for more on the significance of non-interference by tribal administrators see Cornell and Jorgensen 2007). Tribal programs that were not important to the tribal council necessitated that dedicated staff members be creative in how they allocated resources and prioritized projects, as well as in how they

communicated with the tribal leaders. Additionally if program staff must fight tribal citizens over regulations and other matters of control, they cannot focus on expanding revenue-generating programs, marketing or other such matters. This is not to say that tribal councils or citizens should be uncritical of or uninvolved in fish and wildlife department matters, but rather that among the survey cases, true support—beyond simply paying lip service to the program—is an important ingredient in revenue generation.

Governance Structure

This condition refers to the forms of governance structures that tribal fish and wildlife management programs may take, categorized as bureaucratic, market and clan. The form of governance structure matters to the existence and operations of tribal fish and wildlife programs, but what form these structures take and whether or not this form is effective depends upon many other conditions specific to individual tribes. Certain governance structures emanate from or respond to diverse organizational needs; goal congruence between various actors, performance ambiguity for actors, and various stakeholders' power all have the potential to shape the form of governance structure. Contrary to some of the literature, elements associated with clan forms and logics may not necessarily hinder tribes from operating effective programs, producing healthy fish and wildlife or earning significant revenue from these programs, even for cases in which other conditions, such as organizational size, would be expected to further accentuate the negative effect of clan characteristics on outcomes. Importantly, the extent of bureaucratic structure present among these programs seems to have minimal or no consequences, but some bureaucratic characteristics are shared among all the case study

cases and therefore may be essential (though to varying degrees) for these outcomes. The intermixing of bureaucratic and clan-like structures produces inconsistencies and organizational challenges, as well as flexibility in responding to diverse organizational needs and radically different constituencies. Tribal fish and wildlife programs allow us to better understand how these complexities hinder and help tribes in their management efforts and complicate arguments surrounding local resource management effectiveness.

Although the clan and bureaucratic characteristics of programs are discussed further in Chapter Six, below is a discussion of the strengths and challenges of hybrid governance structures for tribal fish and wildlife programs.

Flexibility and Creativity in Responding to Diverse Stakeholders

As tribal programs must interact with a diverse group of stakeholders—each with varying degrees of power to offer and to exert over tribal programs—their hybrid governance structures help them shift from one organizational need to another. This shifting is evidence of flexibility in organizational operations moving between clan-like and bureaucratic-like logic as needs, pressures or resources arise. For example, bureaucratization is to some extent necessary in receiving 638 contracts with the Bureau of Indian Affairs, while tribal citizens and tribal leaders may have needs that require different governance structures of their programs.

This shift in engaging various aspects of governance structures may be driven situationally in response to various stakeholders. One nation that demonstrates this hybrid governance structure relies heavily on its bureaucratic elements in dealings with

the federal and state governments and non-tribal publics.¹⁰¹ For example, officially tribal citizen activity is regulated by an extensive system of codified rules, published for the tribal and non-tribal public to read. This nation has received attention for its effective governing institutions, which includes a separation of powers. Therefore, it is well-known that if one were to break the fish and wildlife code an independent and experienced tribal court would oversee prosecution and punishment. Tribal conservation officers work closely with state conservation officers on cases in which tribal citizens' activities fall outside of tribal jurisdiction. Non-tribal citizens who live within the reservation boundaries are satisfied with the level of regulation applied to tribal citizen activities. At the same time, tribal citizens may hunt, fish and gather according to tribal customs that do not perfectly match the formal regulations. If tribal citizens feel they must harvest an animal out of the legal season or in a larger quantity, they may do so if it is in line with cultural customs. In such cases, if cited by the tribal conservation officers, the tribal citizens may appeal to designated cultural experts who will inform the judiciary on the matter. This enables tribal citizens to hunt and fish according to shared understandings of acceptable activities, while offering a more formal set of tribal citizen regulations and processes to appease non-tribal reservation residents and other law enforcement agencies.

Every tribal program in this study had staff who talked about flexibility and the opportunity to be creative in their work. For example, one former fisheries director recalled the very unspecific guidance he received on his first day of work, which allowed

¹⁰¹ Some of the illustrative stories in this chapter come from personal communications with a number of tribal nations in addition to the seven case studies.

him to experiment in pursuing his programmatic goals: “I went to see [the tribal leader] and said, ‘What do you want me to do?’ He looked at me and said, ‘Go do good things for the fish. Come back when you have a problem.’” Some tribal staff explicitly claimed their way of operating enabled them to do more and be more effective than the state fish and wildlife departments or the federal programs due to their rigid structures which made some of the more bureaucratic management work “odd” by comparison. Regulations are a good example. All cases with codified citizen hunting and fishing regulations based these at least to some extent on traditional norms regarding these activities. Formal, written regulations themselves, however, are typically seen as an element of bureaucracy. For no case did traditional norms perfectly overlap with the codified regulations. For the Confederated Salish and Kootenai Tribes, this is handled by an important exception to the regulations, stated on the front of the tribal citizen regulation pamphlet: “These regulations will be applied in such a manner as to avoid interference with the cultural and religious practices of Tribal members, as protected by the American Indian Religious Freedom Act of 1978.” The printed regulations are law, unless a cultural reason can be cited for an activity in which case the regulations are superseded by rights to cultural practices. This citizen pamphlet parallels the two non-citizen regulation pamphlets developed for non-citizens who reside within the exterior boundaries of the reservation and for those who reside outside. The CSKT own approximately 64% of the land on the reservation, leaving a significant proportion owned by non-citizens (Tiller 2005). Conflict between non-citizen landowners and the tribe resulted in a court mandate to resolve regulation differences. The solution was a special joint tribal-state permit for

non-citizens residing within the reservation. That tribal citizens are regulated similarly *de jure* has diffused tensions amongst all parties. The CSKT citizen activity is regulated, and yet the citizens are not inhibited from performing any cultural activities by these regulations.

At Yakama, where the bulk of the land is tribally owned and the issue of non-citizen regulation is less prominent, tribal citizens are much less formally regulated than at CSKT. For some select species, seasons, limits and permits are required. However, traditional laws—which are not written down—also apply. What is important about regulations is not that they are written but that they are consistently applied and followed. Tribal citizens can be cited for breaking the traditional norms in addition to breaking the codified regulations. In either case, if a tribal citizen must go to court to resolve their citation, the individual may request to be heard by a traditional court, made up of elders who will rule in light of tradition. Providing both a tribal court whose jurisdiction is recognized by the state and federal governments as well as a traditional court whose jurisdiction is also recognized by the tribal citizens allows enough flexibility through regulation to appease multiple parties in regulatory disputes.

In 1997 when the fisherman of Red Lake recognized their walleye population had hit rock bottom and that they were facing a nearly irrecoverable fishery collapse, the members of the Red Lake Fisheries Association essentially voted themselves out of their jobs by pushing for an immediate moratorium on walleye fishing. This action reflected highly shared values and goals. That the tribal-citizen initiated moratorium reflects tribal values can be illustrated by the incredible compliance record: during the decade-long

moratorium, only one violation by a tribal citizen was recorded. After the recovery of the walleye fishery, a survey of tribal citizens revealed overwhelming support for greater restrictions on tribal citizen fishing as well as agreement on continuing to restrict non-tribal citizens from harvesting the walleye. New formalized regulations over the walleye fishery reflect widely shared traditional values and support traditional practices.

Although generally tribes do not fall under state regulatory or adjudicatory jurisdiction, there are exceptions in PL-280 states like Minnesota. The Red Lake Band managed to fight state jurisdiction, but the Fond du Lac Band did not. Therefore, in designing their three sets of regulations (for the 1837 treaty ceded territory, the 1854 treaty ceded territory and the reservation itself) the Fond du Lac Tribe had to create regulatory codes that would be acceptable to the state. Tribal staff created regulations that very consciously reflected traditional practices and then painstakingly negotiated with the state to get reasonable codes passed.

At White Mountain Apache and San Carlos Apache, there is a very rational-economic orientation towards the fish and wildlife programs. Both of these tribes are severely economically depressed, while both have the potential to make significant money from public recreation programs. At WMAT the program staff makes careful attempts to calculate maximizing profits while minimizing outsider influence. At WMAT early public programs focused on harvesting species not traditionally hunted or fished by tribal citizens. As tribal citizens increasingly engage in these activities as well, non-citizens' activities are restricted to selected areas, minimizing both their impact on tribal land and resources as well as minimizing interaction between tribal citizens and

non-citizens. At SCAT, the popularity of the trophy hunts has attracted so many wealthy hunters that the program staff can be selective in who they grant permits to, now focusing on those who share similar hunting ethics as the tribe—the program staff has worked towards balancing bringing people in, but bringing in the right kind. Both WMAT and SCAT are run by directors with formal or practical business backgrounds, and the language staff use at the programs suggests a rational-economic business orientation. Yet both programs displayed flexibility and creativity in their operations. The WMAT in particular has developed some very innovative revenue-generating programs that would not have been possible without the organizational room to experiment and abandon or adjust as needed:

For ideas staff are trying to come up with, if they sound good, we'll try them. You know, you just have to be able to hang in there and take a little time. Sometimes a great idea just takes off. Sometimes it takes a little time and takes a little tweak here and shift there, and it does well. You just have to hang in there. A lot of them are really good ideas; if you don't give them enough time to grow, they don't develop.

More bureaucratic organizations, while commonly known for taking considerable time to affect change, generally have less ability to experiment and wait on the effects of creative projects. In light of funding flexibilities, Chuck Schultz, Director of the Laguna Pueblo Natural Resource Department said,

I have heard resource managers from both state and federal agencies state that in some ways they envy the tribes' situations. Many Indian reservations have become critical pockets of habitat that do not have the same public pressures for management objectives. Almost "preserves" if you will. There is also the side that if we are using tribal monies (not state or federal grant monies) where we can just plan and implement a project in an effective and efficient manner. Whereas if you were doing the same type of project with state/federal funding, well it either could not be done, or the red-tape would make it un-bearable or it could take forever.

This flexibility and opportunity for innovativeness at the individual staff member level was often cited as an exciting aspect of the work in these programs, particularly for non-tribal citizens. Unlike for some tribal citizen employees, non-citizen employees are hired having attained very specific technical credentials (such as a master's degree in biology, for example). Across the cases, non-citizens who did not quickly become socialized into the tribal culture found themselves unhappy with their work and leaving their positions shortly. Those non-citizen employees who have become socialized and remain with the tribe find themselves dedicated to the tribal goals—which in every case reach beyond a natural resource arena—and particularly happy with what they consider a unique opportunity in their field to be innovative and affect change. One employee summed up sentiments reflected across cases:

When you work for a tribe doing this kind of stuff, you're involved in everything. I mean, from managing trust accounts, money, financial things, all the way to negotiating with refugees and I mean, involved in a hundred different things. You just get involved in everything. You're not in a position where, like if you work for the federal government, you get in and this is your little job here and that's what you do. You get involved in everything. So it's real exciting for the right type of people that like this kind of work and have more of an attitude where you don't want to do things the way the norm is. It's a good place to work. And it's a real family-oriented place, too. The tribe is like one big family and it's really a pleasant place to work.

In addition to non-citizens, some tribal citizens also expressed acute awareness of the unique positions they had in these programs. One staff member said, "In [our program], it's really neat because there's really an entrepreneurial spirit. You just get in here and just tear into it and go. Look at every opportunity and leverage every dollar as much as you can." This staff member's position—like most others in these programs—

came with no specific job description, allowing him to be able to try new things while being able to interact with the other bureaucratic agencies. Another articulated his perception of this unique position by saying,

When we got into salmon restoration, it had nothing to do with science. It was about a strong will to preserve a historic way of life. I think too often when we look at our programs, especially when you go off to a science school or an engineering school, you manage your successes by spreadsheets, by data bases. But in Indian Country—and I think this is why non-Indians love to work for tribes and natural resources, because you can be a scientist with a heart—there is such a deep intimate connection, that relationship that exists today between the natural world and the preservation of Indian people, physically, spiritually and culturally. So I think that's why we have a greater strength and the capacity we're building outstrips that of state institutions.

When programs are open to outsiders who will be socialized, they allow their programs to be served by the best staff possible. At the same time, some of the programs are flexible enough to fit lesser-trained staff in. At WMAT a long-time conservation officer developed knee problems and a new position was created for him, allowing him to work indoors. Similarly at Yakama, the wildlife department has found room for a recent stroke victim—a traditional tribal citizen who used be known for his drumming and singing; he goes out with wildlife staff for four hours a day to help with his rehabilitation. The Yakama fisheries department is enormous—out-sizing many state fisheries departments around the country. With such a large number of staff, one might assume a bureaucratic form would be needed to manage a hierarchy. However, this department absorbs tribal citizens into the programs and eventually plugs them into positions where they want to be or where they fit in; they need not necessarily be hired for a specific position or with specific qualifications. Due to their size and organizational philosophy, at Yakama no non-tribal citizen will lose their job to a newly qualified or interested tribal

citizen; as one non-citizen employee said, “We always find a way [to fit citizens in]. And that’s the real exciting thing.” Despite its size, Yakama demonstrates its clan-like character.¹⁰²

The effectiveness of general operations can also be viewed in light of clan and bureaucratic elements. The tribal programs take a holistic approach to management whereby the entire ecosystem, including people, in addition to spiritual and cultural aspects, is considered. This approach does not allow for rigid departmentalization as is the case for state and federal fish and wildlife agencies. For each of these tribal programs, individual staff members—who likely do not have a detailed job description—constantly bridge across disciplines, finding it impossible, for example, to separate the cultural issues from the hydrological. At Yakama, “there’s not fish and wildlife, culture, water—these things are all the same. And the way the Yakama Nation looks at it is really all this stuff is cultural restoration.” Another tribal leader illustrated the overlap between natural resources and culture when he stated, “Trees are not resources, they are relatives.” Further, when funding is tight, the staff needs to be versatile enough to fill in when necessary for short-staffed programs. At Red Lake there is a shortage of conservation officers; consequently, the wildlife and fisheries biologists also respond to nuisance animals. At Crow, the game wardens handled the only meth bust there has been on the reservation, bridging not only within the department, but across tribal departments. These crossovers were found at every program in this study, and most of these programs have been recognized as the management authorities in their regions or even the world on

¹⁰² Recall that the Yakama fisheries programs are well-funded through Bonneville Power Administration and other sources (see Chapter 3).

particular management issues. One staff member summed up a common perspective that “everyone understands where you want to go, but there’s got to be several different ways to get there.”

Regarding matters in which there might be less flexibility, in determining which ways to go, tribal program staff sometimes need approval from the tribal council. However, unlike for their state or federal counterparts, tribal staff can often easily and quickly access tribal leaders where decisions may be made on the spot. At CSKT tribal leaders are available with an open schedule twice a week. At Yakama council members’ doors are open for drop-ins. At Fond du Lac the tribal secretary/treasurer is the former director of natural resources. It is rare that state or federal natural resource managers can drop in on the governor, legislature or president. This accessibility allows for quick decision-making when needed. When Red Lake decided to institute the moratorium on walleye fishing on Red Lake, the State of Minnesota needed two more years to enact a state moratorium.

Additionally, this flatter organizational form also means that not only do managers and other staff have direct access to tribal leaders, but they often approach those leaders with an accurate understanding of what the leaders expect and value. Leaders and managers in turn are in no ivory towers kept apart from the ordinary tribal citizen. Typically leaders and managers receive extensive input from citizens through a variety of formal and informal processes. Whether or not the goals of all parties are identical is separate from the fact that all parties are aware of the understandings, wishes and needs of everyone else.

Inconsistencies and Organizational Challenges

While elements of clan and bureaucratic organizational forms allow tribal programs to respond to various actors and organizational needs, these organizational hybrids also come with inconsistencies and challenges.

Amongst these cases the Crow and the Yakama are the least bureaucratic. Due to differences discussed elsewhere in this dissertation, the Yakama programs are for the most part thriving while the Crow face some considerable organizational challenges, despite some major recent gains in the management realm. The most all-encompassing challenge for the Crow has to do with the turnover in tribal staff. In the past, when a new chairperson was elected, he or she let go all tribal managers and their staffs and replaced them with others. The new constitution adopted in 2001 has officially changed this practice; however, these changes will only be tested once a new chairman is elected.¹⁰³ Nevertheless, the current natural resources department is a reflection of this turbulent past and once again started over virtually from scratch in 2003. This turnover is inherently a difficult process for any fish or wildlife management program; combined with a scant written record of past policies or department activities, it becomes extremely challenging. Some activities at Crow that seemed more productive or organized in the past are not performed today. The sparse institutional memory leads to facts being disputed or estimated and well-intentioned employees sometimes offering conflicting statements. The challenges that come with high turnover have been documented elsewhere by Cornell and Jorgensen (2007). At Crow, traditional norms are supposed to be the

¹⁰³ In November 2008, the tribal chairman, Carl Venne, was re-elected, but in February of 2009 Chairman Venne passed away. A new chairman will soon be elected.

safeguard against overharvest, but wildlife and fish populations are not thriving on the reservation. While one might conclude that more bureaucracy would benefit Crow management, clans can be as efficient as bureaucracies. The inappropriateness of imposed governmental form and its related dysfunctions seem to be interfering with management methods that worked in the past but are no longer effective at maintaining the resources today.

Another challenge centers on enforcement when cultural committees or traditional laws have a strong influence on regulations. At one nation, the tribal court may throw out a case—perhaps intervened in by cultural committee members—for cultural reasons that do not match any laws or formal regulations and do not have to be explained. While this certainly reflects flexibility and response to the cultural needs of tribal citizens, it makes enforcement difficult as officers may not be privy to all the culturally sanctioned activities—particularly when there is little or no written record of acceptable cultural behavior. The cultural committee has influenced regulations citing cultural reasons that are not even articulated. Speaking of the tribal council, a conservation officer stated, “Although we work for them, they’re our boss, they wrote the laws, they told us to go enforce them. It’s not what they really want. And they’d be pretty upfront with that sometimes... So the officers get second guessed a lot. It’s not a reprimand because it’s not a real formal process, but we get the message. There are certain things they don’t want us to do and certain they do want us to do.” At Yakama there is a similar cultural process, although with less frustration for the conservation officers. The Yakama Nation has no constitution and, as one Yakama interviewee stated, “people say we have this

treaty of 1855, but there's a law that's much older than that and much more important than that and that's the laws that's been handed to us from the Creator." These traditional laws are not written down but are enforced for tribal citizens.

While a more streamlined or flatter government can enable quicker decision-making, it can also be related to a lack of separation of powers wherein tribal council members may get involved in day-to-day management operations or potentially interfere with tribal court processes. At one tribe, the enforcement officers felt that council members interfered with fish and game matters particularly; interestingly this tribe has a long-established constitution that clearly provides for separation of powers and its government is often hailed as a perfect replica of a civics textbook example of good governmental form. In fact, however, enforcement officers felt that they were the ones working to maintain the separation and that this was an impossible task given the connections between the council and the court. At another tribal program, where a separation of powers was not officially claimed, the natural resources staff recognized that interference by the political bodies in program operations was producing major problems. A large body of literature from the Native Nations Institute and the Harvard Project on American Indian Economic Development demonstrates that government involvement in daily program activities undermines the success of those programs (for a brief summary, see Cornell and Jorgensen 2007).

Because of the tribes' interest in hiring tribal citizens, non-citizens employees may face interesting circumstances, particularly in more clan-like organizations where employment rules are not written down or legally binding. While Yakama, as discussed

above, finds room to fit in up-and-coming tribal citizens without displacing non-citizen employees, other tribes handle this differently. This is not an issue at Crow, who have had little success attracting non-citizen employees across their programs. With the well-known governmental challenges the Crow Tribe faces, individuals as well as organizations hesitate to invest themselves or their money with the tribe. At the CSKT there are explicit five-year potentially-renewable employment contracts with recently hired non-citizen employees. This bureaucratic aspect is intended to allow room for qualified tribal citizens in the department, so that if funding does not allow extra hires, the citizens do not need to wait for non-citizens to retire. However, it also de-motivates these non-citizen employees who have little incentive to work towards long-term goals and little incentive to properly train their replacements. (This actually reflects the situation at Crow where employees may face job loss with a change in chairman.) In contrast to the CSKT or Yakama approach, the San Carlos department tells new non-citizen employees that they may be let go as soon as a tribal citizen is trained to take their place. Although this did not seem to threaten the non-citizen biologist I interviewed, this sole biologist has since left the tribe for personal reasons and there has been no replacement; until the funding improves and tribal citizens obtain their degrees, this policy is unlikely to actually affect any non-citizens who may be hired with SCAT in professional positions.

In contrast, at Red Lake and the White Mountain Apache Tribe, non-citizens have performed essential responsibilities that could not be performed by tribal citizens for cultural reasons. Tribal citizens at both Red Lake and WMAT have maintained strong

traditional beliefs, many of which relate to fish or wildlife. At Red Lake, non-citizen employees deal with nuisance animals that for cultural reasons such as those surrounding the killing of bears or encountering owls are likely not going to be addressed by tribal citizens. Similarly, at WMAT, one of two non-citizen employees (out of a staff of about 100) heads the sensitive species program that oversees the Mexican spotted owl project. While this biologist said that cultural changes as well as clarification from some elders regarding owl taboos have enabled some tribal citizens to work with her on these projects, when she began she was the only person who could have taken on these tasks. These practices of dealing with non-citizen employment reflect a larger issue of inconsistencies between particular goals and the means sought to achieve other goals.

Tribes have at least some degree of control over all of these above conditions. They can act to improve these conditions; they can also act in ways that undermine these conditions. If change in these conditions is possible, it is possible within the tribes themselves. Most of these conditions are clearly benefits to tribal programs related to various outcomes and they can be approached from multiple directions. Degree of formal tribal citizen regulation is a condition that is less unidirectional and must be carefully considered by tribes attempting to best manage their wildlife.¹⁰⁴ Hybrid governance structures also bring with them both strengths and challenges.

¹⁰⁴ Tribes should pay attention to the effectiveness of regulation, perhaps particularly where it is more dependent on culturally embedded norms enforced by public opinion rather than on explicit, formal rules enforced by formal sanctions. Although high (formal) regulation appears to have mixed effects on outcomes in these analyses, the effects of regulation in general (including both formal and informal) may be more unidirectional. Tribes that have high regulation but low formality or explicitness may appear to have low regulation in these analyses, as formal regulation was the measured condition. Cultural norms are more difficult for an outsider to get at, and they were not the focus of this research. However, there is the possibility that where these analyses find low (formal) regulation, there may be informal (normative)

2. Conditions over which tribes exercise relatively little control

While the conditions above may be largely a matter of internal decision-making and action, in contrast there are also conditions for which tribal control depends on collaboration with outside actors. These conditions highlight the multiple constituencies tribes may need to respond to in order to exercise their sovereignty. For these conditions, tribes need to be appealing partners or strong players in the management arena.

Treaty Rights and Land Base

Within the fsQCA analyses, several pathways to tribal management contained either tribes with a large land base or tribes with a highly contiguous land base, or both. In the pathways, sometimes treaty rights substituted for either of the land conditions. Every pathway contained one of these three conditions.

In 1871 Congress passed legislation that prohibited any representatives of the federal government from making new treaties with Indian tribes. Clearly, it is no longer possible for tribes to negotiate treaties with the federal government. However, treaties may be reexamined, and the rights retained within them may be reinterpreted. When litigation involves the courts interpreting treaty rights, this can either benefit or inhibit tribal authority. Courts may interpret treaty rights as having been intended to be temporary, as was the case with treaty language for the Crow regarding “the right to hunt on the unoccupied lands of the United States so long as game may be found thereon, and so long as peace subsists among the whites and Indians on the borders of the hunting districts” (Treaty with the Crows 1868). In *Crow Tribe of Indians v. Repsis* (1995) the

regulation that is not codified. Unfortunately, I lack sufficient data to resolve this here, but may pursue further research in this direction in the future.

10th Circuit held that “such treaty provisions were abrogated at statehood pursuant to the equal footing doctrine” (Cohen 2005: 1137). On the other hand, courts have also reaffirmed and made explicit tribal treaty rights. For example, Judge Boldt interpreted the fishing clause in Stevens treaty language, “That the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians; and at all other usual and accustomed stations, *in common with the citizens of the United States . . .*” [emphasis added] to mean the Indians have rights to 50% of the fish in the rivers. However, this judicial decision and others like it have drawn considerable backlash from anti-treaty, anti-sovereignty groups and individuals (Getches, Wilkinson, and Williams 2005).

Overall, treaty rights provide a legal basis for exerting fish and wildlife management authority. The key is in the exercise of these rights. For example, several tribes have treaty rights to hunt buffalo in Montana. In 2006 the Nez Perce began exercising these rights for the first time in over a century. Now having organized three annual buffalo hunts on public land around Yellowstone National Park, the Nez Perce may be joined by the Shoshone-Bannock Tribes and the CSKT in making the hunt a normal part of Montana buffalo management.

Although tribes whose reservations were established by executive order may not have *treaty* rights, they have a strong argument for rights to manage fish and wildlife on their reservation, as long as they demonstrate the capacity to do so. Particularly due to the mobile nature of fish and wildlife whose behavior possibly includes moving from on-reservation to off and back on again, states may be able to usurp tribal rights to varying

degrees if they can demonstrate the tribes are not managing for the health of the species or ecosystems.

The value of having a large land base and/or a contiguous land base in relation to managing a mobile resource is evident. Both land base size and contiguity lead to greater abilities to manage these resources on ecosystem scales. Additionally, the larger the land base, the more likely it will contain infrastructure (such as roads and railroads), natural resources (such as oil, gas, and forests), and other matters of interest to non-tribal governments or non-tribal publics. Related, the greater proportion of land a tribe controls within the boundaries of its reservation, the simpler and stronger are its rights to jurisdiction within those boundaries, and tribes then do not have to deal with junior jurisdictions like cities and counties. Recall the discussion in Chapter One of multiple jurisdictions within reservation lands and the stories in Chapter Three of what this means for the case study tribes. Red Lake is one of the two treaty tribes in the U.S. that successfully resisted allotment and so controls all land within the reservation boundaries. This gives the Red Lake Band virtually unfettered jurisdiction over the land and resources within the reservation boundaries. Similarly the White Mountain Apache and San Carlos Apache reservations were designated by executive order and were spared allotment as well. As discussed, the other tribes are well aware of the challenges of their checkerboard reservations. The greatest political power is conferred where tribes have large land bases, simplified jurisdiction (in the form of a contiguous land base) and de facto sovereignty through treaties.

While increasing a tribe's overall land base or increasing the proportion of land within reservation boundaries may be exceptionally difficult for some tribes, if these gains are possible, they are possible virtually only through negotiations or legal battles with non-tribal governments and individuals. Remember that the Confederated Salish and Kootenai Tribes allocate a large part of their mitigation monies towards buying strategic sections of land within the reservation on which they restore habitat. The Yakama are similarly increasing their land base. Particularly, the Yakama wildlife management staff work with landowners. If a particularly important section is non-Indian owned fee land, the wildlife department negotiates to buy the land. If the section is Indian-owned, the department negotiates to lease it indefinitely. In regards to governmental negotiations, in 1980 the Houlton Band of Maliseet worked to gain recognition through the Maine Indian Land Claim Settlement Act. This recognition came with almost a million dollars to buy up to 5000 acres for trust land (Tiller 2005). Today the tribe owns approximately 850 acres and is working with the Maine state legislature to gain legal authority over their own land.

Tribal Jurisdiction over Non-Tribal Citizens

Tribal jurisdiction over non-tribal citizens is a necessary condition for earning revenue (among the survey cases) and earning significant revenue (among the case studies). While some tribes charge tribal citizens for hunting and fishing activities, none charges a significant amount. Revenue for tribal hunting and fishing programs comes almost entirely from non-citizen fees through permits and tags. Although this can generate fairly modest revenue, such as is the case for tribes that sell inexpensive permits

for small game, birds or fish, it can also reach into the millions as is the case for tribes that sell or auction permits for the most prized big game animals like trophy elk or big horn sheep.

Whether a tribe wants to sell opportunities for fishing and hunting to non-citizens depends upon a lot of factors other than simply earning revenue. Does the tribe want to share its resources? And if so, does this take away resources for tribal citizens and would this be permissible? Does the tribe want non-citizens physically on tribal land? Does the tribe want the responsibility of enforcing regulations for non-citizens? If so, does it have the capacity to do so?

As these questions imply, the benefits of tribal jurisdiction over non-citizens extend beyond economic issues to larger matters of sovereignty and self-determination. While non-citizens may never legally hunt on tribal land without tribal approval, this is a basic private property right. When tribal jurisdiction goes only this far, the tribe is equated with any other property owner. When tribes have civil jurisdiction over non-citizens on tribal property or within the exterior boundaries of the reservation they have the authority to regulate how non-citizens hunt or fish and to what extent, they can enforce these regulations with their own law enforcement, and they can adjudicate these matters in their own courts.

As was discussed in Chapter One, tribes have retained the right to regulate non-Indians on tribal trust land, but tribes lost criminal jurisdiction over non-citizens in *Oliphant v. Suquamish Indian Tribe* (1978). This necessitates civil language in tribal fish and wildlife codes regarding non-Indian activities, and dramatically affects how tribes are

able to respond to non-citizen illegal activity. While it appears highly unlikely that tribes will be able to regain criminal jurisdiction over non-citizens anytime soon, tribes may still make inroads in the area of civil jurisdiction (see Chapter Seven in Getches, Wilkinson, and Williams 2005).

While in *Montana v. U.S.* (1981) the Supreme Court ruled that the Crow Tribe did not have jurisdiction on fee simple land within the reservation, one exception allows for tribal jurisdiction when an activity would interfere with the “political integrity, the economic security, or the health or welfare of the tribe.” Although this ruling was initially intended for non-citizen activity on fee simple land, it has been increasingly applied to activity on trust lands as well. Tribes therefore need to be particularly attentive to the governance structure they have in place that may protect them from attacks on their jurisdiction. In particular, a carefully written fish and wildlife code can make provisions for non-citizen civil penalties that outline the maximum fines possible, the limits of confiscation of equipment, etc. without toppling over into penalties that would be defined as criminal. In turn, fish and wildlife codes—and the power to regulate and adjudicate non-citizen activity—are meaningless without the capacity to enforce, and the tribal courts to handle these activities (for a relevant case, see Brimley et al 2007).

Part of retaining jurisdiction is asserting it. While the Crow Tribe has had jurisdiction over non-citizens on tribal land, only recently has it increased its enforcement of non-tribal citizen regulations after a period of not doing so. For the CSKT, keeping non-citizens from hunting or fishing on the Flathead Reservation seemed impossible. Once the Tribes were selling permits of their own to non-citizens, the State of Montana

took them to court wherein it was decided that the two parties needed to come to an agreement regarding regulatory jurisdiction. The result is a joint advisory board that proposes non-citizen regulations to the Tribes and the state. Although this process means the Tribes must work with the state, overall they have decision-making power in relation to the regulations, tribal officers enforce these non-citizen codes, and civil cases are pursued in tribal court.

It is worth noting that although the overwhelming majority of tribes represented in the case studies and the survey felt tribal jurisdiction was extremely important, for the Fond du Lac Tribe, this state jurisdiction over non-citizens on tribal land and other land within the reservation is acceptable. The costs of attempting to actualize tribal jurisdiction appeared to be too high; meanwhile natural resource staff and tribal citizens were content with the current situation. Nevertheless, true sovereignty means having the ability to chose what authority a tribe wants to have and to exert. Short of fully exercising jurisdiction on their own, tribes that find hands-on jurisdiction too costly may still retain decision-making power through cooperative agreements with other governments, as the Fond du Lac case illustrates.

Adequate and Steady Funding

Funding is of course exceptionally important. On the ground, everyone is well aware of this. Only five of the 37 programs from the survey cases said they had adequate funding to run their programs. This is evident in that inadequate funding is present in both pathways to healthy populations, either in combination with tribal management and high citizen regulation or with tribal management and strong court ability to handle

wildlife matters. In the FsQCA analyses, funding proves to be a sufficient causal condition for healthy fish and wildlife populations, and inadequate funding is a necessary condition for unhealthy populations. This suggests that while funding is sufficient, and inadequate funding can have dramatic consequences, funding itself is not absolutely necessary. The pathways to healthy populations with inadequate funding demonstrate this, as does the existence of so many tribal programs operating on less than adequate funding.

Adequate and steady funding for fish and wildlife programs is a matter internal to some tribes in that some tribes may have resources that can be allocated to programs that are not self-sufficient. While other programs could be entirely self-sustaining and still make a profit for the tribe, few programs retain the revenue they produce. It is more common for revenue from these programs to go to tribal coffers and for the tribe in turn to budget money back to the programs. This explains how very lucrative programs may still struggle to pay their employees or meet basic expenses.

Some tribes find innovative ways to compensate for inadequate funding, for example drawing on the dedication of staff members who may work nights or weekends. But this does not solve the funding problem; rather it is simply an adjustment to it. For most tribes, addressing the funding problem adequately requires either increasing revenues (from fish and wildlife or from other programs) or turning to outside sources, which requires appealing to outside parties that may support these tribal programs. One means for doing this is to negotiate 638 contracts with the BIA to take over management responsibilities. With these contracts comes, theoretically, the BIA funds tribes in the

amount that the BIA would have spent on particular activities. While this funding is significant for many Self-Governance tribes, federal funding has been decreasing predictably over the past decade so much so that some tribes now hardly cover staff salaries alone with the allocations.

Other major sources of funding come from federal, private and non-profit grants. While the accessibility of these grants varies widely, quite often they require matching funds. Tribes that succeed in receiving these grants often have a little seed money from their tribes that allows them to apply for these kinds of matching grants. While having an effective grant writer would likely be quite beneficial, in most programs, biologists and directors count grant writing as part of their work responsibilities. Furthermore, having gotten previous grants looks good on future grant applications, increasing the chances of receiving them. Anecdotal stories from tribal programs detail tribes hiring grant writers whose first grant applications are not successful, so in consequence the tribe fires the grant writer and the following year hires a new grant writer whose first grant applications are not successful, so the tribe fires that write, and so on.

Some tribes have also been able to capitalize on funding from private corporations or governments for mitigation money. Similarly, tribes may also look out for any affects on their reservation or ceded lands that may be covered under the CERCLA (better known as superfund). This also provides an opportunity to get federal funding to restore and manage habitat.

An important caveat to this discussion of funding is that in some cases funding concerns can be addressed internally within the tribes themselves through successful

economic development which may include the fish and wildlife programs themselves. Those who do not have such options are more reliant on outsiders. Fish and wildlife programs are closely linked to other tribal activities. Tribes that have a governance structure that supports culturally-appropriate economic development and who plan strategically to address their nations' priorities are likely to produce revenue from some program (or taxation) that can support fish and wildlife management (see Harvard Project on American Indian Economic Development 2008 and Jorgensen 2007). Those tribes with challenges in other governance or development arenas are more likely to rely on outside sources of support for management.

3. Context

Although above I discussed these conditions independently, context matters in how these conditions (both conditions tribes can control and those for which tribes have to appeal to outsiders) affect tribal fish and wildlife management programs. Below are the recipes to each outcome, with conditions identified as largely under the control of the tribes highlighted.

Tribal management. For tribal management itself, among the case study cases two recipes exist. These are:

<p>LONGEVITY*PROACTIVE + PROACTIVE*citizenreg</p>

(Keep in mind dedication and clan logic are common conditions amongst all the case study cases.) When we add two more conditions to the analyses we get a more complex solution with four pathways:

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LONGEVITY*PROACTIVE*bureau*LANDBASE*treatyright+
LONGEVITY*PROACTIVE*citizenreg*landbase*TREATYRIGHT+
LONGEVITY*PROACTIVE*CITIZENREG*LANDBASE*treatyright+
longevity*PROACTIVE*bureau*citizenreg*landbase*treatyright

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You can see that the first set of two recipes is a superset of the second set of recipes.

Among the survey cases, three pathways exist; they are:

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LANDBASE*citizenreg+
TREATYRIGHT*citizenreg+
LANDBASE*TREATYRIGHT

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When having a large land base is also included for the survey cases, there are still three paths:

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LANDBASE*LARGELAND+
LARGELAND*treatyright*citizenreg+
Largeland*citizenreg*treatyright

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These analyses indicate that there is a lot tribes can do—within their own realm of authority and activity—to affect tribal management of fish and wildlife. All the conditions in the superset (the first set above) of pathways for tribal management among the case study cases are conditions under the control of the tribes themselves. Longevity, proactive behavior and regulations of citizen activity, as discussed above, can be developed, encouraged and managed by tribes. The subset (the second set above) of pathways to tribal management contain additional conditions which are not entirely under the control of the tribes. However, none of these pathways indicates that all of these conditions are necessary. Instead, tribes have either a contiguous land base or treaty rights, or neither, and they still manage their own programs. It is worth noting here again that proactive behavior is a condition within all pathways for the case study cases.

Among the survey cases, fewer conditions in the pathways are under the control of tribes, but this has more to do with the difficulty in measuring these kinds of conditions within the surveys. These two latter sets of pathways for the survey cases correspond to the earlier set for the case study cases in that—despite a lot of the discourse among tribal fish and wildlife managers—having a large, contiguous land base, as well as treaty rights, is not the magic solution for tribal management. Indeed, again, most pathways include having a land base *or* treaty rights (and for some pathways both or neither).

Population health. For fish and wildlife population health, among the survey cases, there are two recipes:¹⁰⁵

TRIBALMANAGE*CITIZENREG*adeqfund+ TRIBALMANAGE*COURTABILITY*adeqfund

These causal combinations are very hopeful for tribes wishing to have healthy fish and wildlife populations. Tribal management is in both recipes, and indeed the fsQCA finds tribal management almost always necessary. Tribal management must be combined with either strong regulations for tribal citizens or with an effective court. Additionally, among these cases, adequate funding is not present in either pathway. Although the discussion above categorized funding as not entirely within the tribes' control, one could argue that it is fairly simple for tribes to receive inadequate funding—that this is actually perfectly within their control. These analyses do not suggest that inadequate funding itself is necessary, but rather these cases that do have healthy fish and wildlife

¹⁰⁵ Remember that because six of the seven case study cases had a positive outcome (healthy fish and wildlife populations) fsQCA was less useful and therefore not interpreted here.

populations do not have what they consider adequate funding. This also is a hopeful sign for tribes; healthy populations are not dependent on funded programs, even if they may be greatly aided by them.

Significant revenue. For significant revenue, among the case study cases, there is one pathway:

LONGEVITY*CITIZENREG*HEALTHYPOP

For the survey cases, there is also one pathway:

TRIBALSUPPORT*HEALTHYPOP

Among both the survey and case study cases, conditions in the few pathways to revenue earning included several conditions within tribes' control. Among case study cases, longevity of tribal employees combined with strong citizen regulations and healthy populations led to revenue generation. Among the survey cases, it was tribal support, along with healthy populations, that resulted in revenue. In the above analyses, healthy populations were seen as outcomes rather than conditions under tribal control or largely beyond the realm of tribal control. Nevertheless, as noted immediately above, the conditions supporting healthy populations are all under tribal control. This again is suggestive that there is a lot tribes can do to produce and sustain healthy fish and wildlife populations.

4. Conclusion

The complex world in which tribes must manage natural resources and manage the people who use them requires that decision-makers consider the various pathways to becoming effective managers and the tribal-specific goals in relation to management that

are appropriate for their nations. In some important ways tribes are limited in what they can do, particularly in regards to land base size and degree of jurisdiction over non-Indians. More importantly, however, these findings suggest that there are many ways tribes can work to take charge of or support tribal fish and wildlife management without having to appeal to outsiders. These include evaluating the effectiveness of their governance structures (discussed at length in Chapter Six), being proactive in the management realm, encouraging and supporting employee longevity and dedication, carefully evaluating formal tribal citizen regulation, producing and maintaining effective tribal courts, and generally supporting fish and wildlife programs with strategic decisions about management and by hiring and retaining effective managers. While there are some very real limitations to fish and wildlife management external to tribes, within those limits, tribes can do a lot. They have opportunities to assume and succeed at fish and wildlife management.

CHAPTER SIX:

BUREAUCRATIC AND CLAN LOGIC IN TRIBAL FISH AND WILDLIFE PROGRAMS: RESPONDING TO DIVERSE ORGANIZATIONAL NEEDS

Tribal management works well under certain conditions, along certain causal (fsQCA) paths, and generally operates quite differently than state or federal management agencies. However, not all effective tribal management organizations are alike, nor are they all entirely different from more centralized management organizations. Although the common-pool resource literature argues there is a significant distinction between local and centralized (more bureaucratic) institutions, these tribal institutions incorporate both bureaucratic organizing logics and those associated with a clan type—thereby creating interesting organizational hybrids. Understanding how complex tribal organizations work may expand the relevance of the governance structure typologies as utilized in transaction costs theory (see Williamson 1990) while illustrating how tribes are creating innovative governance structures to meet their own management needs.

The governance structures of transaction costs theory—markets, bureaucracies and clans—differ in how each responds to problems of performance ambiguity as well as goal incongruence (Ouchi 1980). As a form of governing structure, a market functions efficiently when performance ambiguity is low and goal incongruity is high. That is, actors within a market know the performance roles for themselves and others—such is the nature of a market in which relationships are contractual; however, the goals of individual actors are distinct. Elements of market logic among tribal fish and wildlife management operations can be seen, for example, in arrangements between hunting

guides and clients at San Carlos or in contractual relationships for non-Native employees working for tribal programs like those with the Confederated Salish and Kootenai Tribes. However, market logic is rare among these organizations. Where it appears, it seems to do so in subordinate roles. Guide relationships, for example, while important to the hunting process, are subsidiary to the organization of the broader tribal fish and wildlife operation, not central to it. At least within the programs included in this study, core organizational features seldom exhibit market logic.

According to Ouchi (1980), under conditions in which actor relations cannot be completely contractual, performance ambiguity increases, a pure market form fails, and a Weberian-type bureaucratic form develops. Goal incongruence decreases in bureaucracies from the market form, as actors within the organization come to trust one another and see payoffs from collective efforts directed towards similar goals, while each actor has his or her own personal goals as well. Therefore a bureaucratic governance structure can be efficient even though performance ambiguity and goal incongruence are moderately high. The best examples of ideal-type bureaucracies for fish and wildlife management come from state and federal agencies where tasks are highly specialized, there is a strong rational orientation to work processes, and there is a clear hierarchical order of authority. However, many tribal management organizations also display elements of bureaucracies, although none are anywhere near ideal-types. NNI and Harvard Project research on Native nation governance in other arenas (outside fish and wildlife management) has found that effective administrations are central to implementing the renewed decision-making power that many tribes have assumed in

recent decades and that these administrations may need to adopt some characteristics of a Weberian bureaucracy, although that work has not explicitly addressed the question of alternative organizational forms (Cornell and Jorgensen 2007).

A third form of logic from the organizational sociology literature is that of a clan. According to Ouchi, a clan functions efficiently under the opposite conditions as does the market. Although Ouchi extended Williamson's arguments about transaction costs almost three decades ago, little attention within organizational research has been given to clans (Rothschild and Witt 1986). Clans are cases that display Durkheim's mechanical solidarity (1933) in which individuals are necessarily interdependent; goal incongruence is low as all members mutually depend upon the collective goal and are generally socialized into a system in which this is clearly recognized and sought. However, in clan forms of organizations, performance ambiguity is high as individuals' tasks are "unique, completely integrated, or ambiguous" (Ouchi 1980:134).

Common usage (and even misguided scholarly usage) of the term clan often refers to a primitive, underdeveloped, less desirable and less efficient form of organization, but this is not an entirely accurate understanding. Some of this bias comes from Durkheim's use of the term, in which he described clans as "the primitive and the simplest known" forms of societal organization (1995:93). However, according to Ouchi, a clan form can be efficient, given the right circumstances, by minimizing the transaction costs between individuals. Furthermore, although a Weberian understanding of organizations predicts a natural process in which organizations transition from clan-like to more bureaucratic forms, there is evidence among tribal fish and wildlife programs that for some tribes,

transition in the opposite direction is also possible and desirable. Thoroughly modern tribal organizations may operate more like clans than those of a few decades ago as clan forms can serve as contemporary tools for contemporary matters. This transition is discussed further below.

Although Ouchi himself referenced Japanese firms to describe the socialization process into clans, contemporary research on clan forms focuses nearly entirely on fringe social groups. For example, Kanter (1972), Kanter and Zurcher (1973) and Zurcher (1973) have offered insightful analyses of communes and other utopian communities of communal living deliberately attempting to reject or transform the dominant culture. Scholars in this area have studied the birth, operations, processes of change and challenges of a variety of communes (see Kanter 1973 for a collection of such work from various scholars). While such groups in the 19th century and earlier might have been described as societies, in recent times they are more typically identified as alternative families, a much smaller social unit (Kanter 1972). Scholarly interest in communes faded with what is considered the modern commune movement of the 1960s and 1970s.

More recent studies of non-bureaucratic organizations have found a somewhat different focus. Rothschild and Whitt (1986) studied “alternative organizations” as a viable means to supporting true democratic participation; these organizations have no hierarchy and all members have equal say in decisions. Although Rothschild and Whitt find these organizations a hopeful sign that Robert Michel’s (1911) forbidding prediction—that democracy naturally transforms into oligarchy—is not inevitable, they have nearly entirely escaped the notice of modern social science. These organizations

challenge deeply held assumptions about bureaucracies and include such diversity as can be found in cooperative news agencies, free schools, legal collectives and cooperative health clinics, all ranging in size from about 10-20 members with rare exception (Jackall and Crain 1984; Rothschild and Whitt 1986). These organizations attempt to share equally not only decision-making but implementation as well; however, this is difficult, and such organizations tend to be short-lived. The most recent work along this vein examines the Burning Man festival (Chen 2003, 2005)—a collective organization successful in implementation year after year. Yet although the festival itself is attended annually by thousands of people and massive organization is required for such an event, this organization need not maintain its structure throughout the year.

Others have looked specifically at feminist organizations or the contribution of feminist influence to otherwise established organizations. While organizational theory generally explores the efficiency of hierarchies, this literature questions that organizations need be hierarchical at all, with some activists arguing hierarchy is even antithetical to feminism (see Browne 1976; Kornegger 1975; Rothschild 1976). Ianello (1992) studies what she calls “modified consensus” within a feminist peace group, a women’s health collective and a business women’s group. She finds that consensus and efficiency need not be oppositional. In fact, several scholars in this area find feminist organizations that make use of both bureaucratic and collectivist approaches. For example, Bordt (1997) looked at women’s nonprofit organizations and argues they are neither pure organizational form. Gottfried and Weiss (1994) study the Purdue University Council on the Status of Women which uses a mix of organizational forms to

fit a diverse membership group, and Reinelt (1994; 1995) finds similar advantages for battered women's organizations in Texas.

Tribal fish and wildlife programs differ from other clan-like organizations found in the literature in significant ways. Perhaps most importantly, they are by no means fringe groups. Virtually the only scholarship on mainstream organizations as clan-like has come from Van Maanen on Disneyland (1991; 1992; 2005) where monetary incentives are secondary, hiring and promotion happen through mysterious processes, and commitment to shared goals is imperative. Otherwise, research focuses entirely on communes, utopian societies and co-ops which can be considered social movement organizations (Zald and Ash 1966). In contrast, tribal fish and wildlife programs are in fact governmental organizations, many of which are larger than the small-sized cases from the literature. Tribal fish and wildlife programs also appear to embrace some clan characteristics for different reasons than other clan-like organizations. However, all tribal fish and wildlife programs in this study demonstrate—to varying degrees—characteristics of Ouchi's clan and share some dimensions of clan logic and organization with other groups from the literature.

Ouchi's dimensions of performance ambiguity and goal congruence are helpful in identifying clan-like elements among the tribal fish and wildlife programs.¹⁰⁶ For example, high performance ambiguity is illustrated by the fact that most employees of tribal management programs have vague or open job descriptions. Their work inevitably entails a wide variety of responsibilities and skills—directors do leg-work, dispatchers do

¹⁰⁶ See Appendix D for a chart of where each case approximately falls in the dimensions of governance structure.

security, biologists write grants or answer the phones, and game wardens do drug busts. Staff talked about being involved with “everything.” This is not a matter of rotating jobs among the employees but rather of individuals picking up tasks as they arise, often regardless of the individuals’ job positions. With so many staff performing such a variety of tasks, these departments are not as hierarchical as their federal or state counterparts in more bureaucratic organizations, even when size is comparable. Tribal managers or enforcement officers can go directly to the head decision-makers (usually the tribal council) to address issues immediately. This also means that tribal programs are much more flexible than federal or state departments. There is a lot more room to try new management practices or adopt new programs; there seems to be recognition that there are several ways to achieve the overall goals; and employees are given a lot of discretion to experiment with those efforts or to attempt something interesting to them. This is possible in part because employee dedication to organizational goals is assured. Furthermore, classic Weberian thought would suggest bureaucratic logic is protection from the effects of high employee turnover; people are interchangeable if the rules and structure remain intact. However, if people do not change, formal rules become less and less important. As was detailed in Chapter Five, employee longevity is a common characteristic within these tribal programs and might explain to some extent why formal rules and paper trails may be less important. At the same time, the lack of rules, the flexibility of the organizations, and the variety of activities are part of the attraction that keeps many employees in these programs for a long time, politics permitting.

Low goal incongruence indicative of clan-like organizations is also illustrated across these cases. All tribal programs strive to employ tribal citizens; tribal citizens that work for the tribal management programs have clearly been socialized to be Apache or Crow, for example, and understand not only the program/departmental goals, but more broadly the values and goals of the tribe itself, throughout their lifetime. Non-citizen employees are not socialized from birth, but must quickly learn the rules, norms and values of the tribal culture in order to remain in their positions as tribal employees. Those non-citizen employees that do remain, in addition to tribal citizen employees, display an extraordinary level of dedication to the tribe, to the fish and wildlife programs, and to each other. Many of them, too, display high longevity with these organizations.

For Native nations there has historically been a tradition of more clan-like forms, remnants of which tribes have carried over through the times to varying degrees. The particular historical and legal situation of Native American nations may also encourage goal congruence apart from simply a carryover from times past. For example, protecting hunting and fishing rights may bind Native people together in a way that is not possible for non-Native sportsmen to share. If you and your neighbor—who is also your cousin—cannot access groceries for your family until the next paycheck comes, with which you will drive fifteen miles to shop—all other things being equal, you share some essential and strong common interests in the health of the wildlife population and tribal citizen access to it in a way that an avid (non-tribal) hunter in Montana does not. If your great-great-great grandfather fished in the same spot you fish in everyday, just upstream from burial grounds that house even his grandmothers—and your fellow fisherman have a

similar story—you share the experience of fishing access differently than even the most devout non-tribal angler who supports his local sportsman’s clubs and stream-access legislation. Although non-tribal sportsmen may band together to, for example, oppose tribal fishing rights—and assert their own—in the Pacific Northwest, tribal rights are embedded in the survival of a larger community. At a much deeper level beyond hunting or fishing, it is about what it means to be a people.

However, with federal policy shifting toward tribal self-determination in the 1970s, there has been a transition from federal to tribal administration that has brought with it an increased propensity towards bureaucracy with additional programs, offices and personnel (Cornell and Jorgensen 2007). The transaction costs of administering programs have been minimized with “638 contracts” that enable tribes to take over functions previously overseen by the federal government. Through this transition, as well as centuries-long disruption to political, economic and cultural patterns, some tribes have lost most of their valued clan features (particularly, clear and unanimously shared goals and cultural homogeneity among the citizens). Others have been able to retain these elements or bring back traditional clan features of organization. As tribes today gain more power and an increasing amount of activities come under tribal control, there are pressures on tribes to be more bureaucratic. Concomitantly, there is also countervailing pressure and opportunity for specific organized activities to become more clan-like. (This is discussed more below.)

Rothschild and Whitt (1986) list eight dimensions in which bureaucratic and “collectivist-democratic” organizations differ: authority, rules, social control, social

relations, recruitment and advancement, incentive structure, social stratification, and differentiation. Imagining each of these dimensions as a continuum with bureaucratic and collectivist ideal-types at the poles, we can place each tribal fish and wildlife program somewhere in between. While no ideal-type organization ever exists, tribal fish and wildlife programs display much of the ideal clan while remaining (again to varying degrees) also more bureaucratic than most of the organizations in the studies mentioned above under the broad category of clan. In comparison to programmatic counterparts with the state or federal governments, most tribal fish and wildlife program cases tend towards clan-like logics. Yet that elements of bureaucracies are present makes these hybrid organizations unique as they try to respond to two very different kinds of pressures: the isomorphic pressures of bureaucratization and the restraining pressures of tribalism to remain true to the core of identity and organization.

Flexibility, Creativity, and Inconsistencies

Although thus far I have discussed these governance structures in light of transaction cost theory, an institutional approach—which focuses on structures responding to stakeholders with the greatest power—may also shed light on these hybrid structures. Institutional organizational scholars would argue that governance structures do not evolve in relation to goal incongruence or performance ambiguity, but rather that as organizations exist in multidimensional environments in which there are various stakeholders, organizations' structures evolve in relation to those stakeholders possessing the most power (Fligstein 1990). However, among these cases, both explanations are valuable. Goal convergence, performance ambiguity, and stakeholder power are all

involved. As discussed in the previous chapter, these hybrid governance structures allow tribes to be flexible and creative in how they manage their fish and wildlife programs. This flexibility and creativity are valuable in responding to various stakeholders. For example, one reason why cultural committees and divergent sets of regulations have come about is the balancing of two different sets of stakeholders, each of which has power. Non-citizen residents of reservations have power: if they are unhappy, they can mount pressure on states and the federal government to interfere with tribal sovereignty. But traditionally-oriented citizens of the reservation also have power: not only can they organize political campaigns to throw politicians out of office, but they have a voice in small communities where reputation is important and social networks are powerful. The pressure they mount for culture to be taken into account in regulation of fishing and hunting is a potent force to be dealt with. Consequently, tribes develop creative solutions through divergent forms of regulation, responding to diverse but powerful stakeholders. Goal congruence still plays an important role as, for example, natural resources staff hold dear the preservation of resources and the way the tribal citizens relate to those resources as critical national goals. However, responding to various stakeholders can be extremely difficult and consequently results in the inconsistencies and challenges discussed in the previous chapter.

Complicating Arguments about Governance Structures: A Movement toward Clans

Ouchi (1980) does not hide a bias towards viewing clans as the most difficult form of governance structure to sustain, leading to a preference for markets (what he viewed as the “natural” way of organizing) or bureaucracies when markets fail.

However, clan logic for Native nations can serve a variety of essential purposes which meet contemporary societal, political and economic needs for communities. At the same time, as with any aspect of an organization, tribal leaders must be aware of changes for which clan-like logic may not adequately respond such as for the Crow where lack of formal regulation no longer supports healthy deer and elk populations. With dramatic transitions in the past few decades regarding transfer of federal administration to tribal administration, there is pressure on tribes to move toward more bureaucratic organizational structures. This pressure comes partly from a belief in the mainstream culture that bureaucracies are the preferred and more efficient way to do things, and partly from the need to create organizations that look familiar to partners, counterparts, the non-tribal public, etc. Most of the organizational literature talks about efficiency—how bureaucracies may be efficient, how other forms can also be surprisingly efficient, under what conditions each type is most efficient. But Cornell and Kalt (2003) remind us that efficiency is worth little without effectiveness, and that the two are not the same: “‘Best’ [in services or programs] encompasses dimensions of both efficiency and effectiveness. That is, it involves both the efficiency with which services are delivered (which can be thought of as the cost per unit of output) and the effectiveness of those services in meeting identified needs (which can be thought of as the impact of the delivered services on the community in question)” (Cornell and Kalt 2003:10; see also Cornell and Jorgensen 2007).

Tribal organizations in this study are not pure clans. Each one encompasses bureaucratic elements as well which meet various needs that clan forms do not. Classic

Weberian thought expects a natural transition from a clan organization to a bureaucratic organization as societies modernize. However, for tribal fish and wildlife programs, there is some evidence of a transition back in the opposite direction. As tribes gain grounds in self-determination, cultural traditions and tribally-derived goals are given more legitimacy—perhaps in combination with achieved recognition as a management authority—and a move towards more clan-like organization is possible. Essentially, some tribes have gained the authority to manage how they best see fit, not according to a model legitimated by the state.

Certainly when tribal fish and wildlife are managed by state or federal agencies, these programs fit nearly ideal-type bureaucracies. The self-determination era, including legal wins that established tribes' rights to manage their own resources (see *New Mexico v. Mescalero Apache* 1983), opened up an entirely new arena in which tribes can assert self-governing powers utilizing their own institutional designs, and clan logics may re-emerge. Many of these formal programs were initiated (or were transitioning from the BIA or FWS) with a small number of non-tribal citizen staff trained in biology and whose only organizational models for fish and wildlife management were bureaucratic. Until the Supreme Court ruling in *Mescalero*, states asserted jurisdiction over tribal citizens and tribal fish and wildlife matters whenever possible. Under this state oversight, tribal citizen hunting and fishing were regulated in a more bureaucratic way than they were when the tribes themselves confirmed their rights. Each tribe that has developed its own fish and wildlife program, beginning with a fish and wildlife code, has fewer formal rules and regulations for citizen activity, more overlapping divisions of labor, more holistic

management philosophies, and often cultural norms that supersede codified law or other authority. As these programs have grown, they have moved towards increasingly hiring tribal citizens and developing their methods for incorporating traditional and cultural management into the institutionalized programs. Cultural committees or cultural advisors are one example. As newly developed tribal fish and wildlife programs got their bearings, over time tribes developed committees or identified cultural experts that would be able to speak to cultural matters in regards to natural resource management. At Yakama, notably this process was initiated by the longtime non-citizen biologist who requested more involvement from the cultural committee with his projects. Another example of a stronger bureaucratic form being preceded and followed by more clan-like forms is at Fond du Lac. When the tribe assumed formal regulation over its own citizens, the new codes were developed to reflect past norms, the period in between being characterized by state bureaucracy. One drafter of the code said, “My grandpa, I can remember him standing firm that you don’t need a license and we don’t need a code: ‘We know when we need a deer, we know when we need fish and we should be able to go out and take it when we need it.’ So the code addressed that.”

Cornell (1988) has detailed the political resurgence of Native nations and Wilkinson (2005) describes this at length as the “rise of modern Indian nations.” With this resurgence comes potential for renewed cultural traditions, strengthened tribal identity, and (to use Ouchi’s words) goal congruence. These changes are reflected in the tribal fish and wildlife programs in this research. For example, surveys of Red Lake tribal citizens during the moratorium on walleye indicated an exceptionally high level of

agreement on management matters—shifting practices from those norms of the 20th century that brought the fishery to near collapse. Related, while many older American Indians today bear the scars of having grown up during the termination period and perhaps experienced allotment and assimilation in their early years, younger adults display a new sense of hope and efficacy. One tribal employee talked about this change: “The exciting thing is that most of the kids are going to school now and want to come back and work for the tribe. They want their education, but they also want to stay very traditional. And that’s kind of a new thing that we’re seeing right now. I’m really optimistic for the future. The youth seem to be really stepping up here, and I wouldn’t have said that 15 years ago.”

Fish and wildlife are common-pool resources that are not limited to symbolic political jurisdictions. For tribal fish and wildlife programs, managing the resources and the people who use them involves interactions with state and federal agencies—some of which are tasked with helping the tribes who may or may not want their involvement, some of which are continually trying to usurp tribal jurisdiction and sovereignty—with non-tribal hunters and fishermen, with trespassers, and with non-tribal citizens who may live within the reservation boundaries. Add to this mix a large body of complicated and sometimes contradictory federal Indian law. The result for tribes that are attempting to or succeeding at managing their fish and wildlife is a hybrid mix of clan and bureaucratic logics, applied when needed or available, in an effort to respond to various constituencies and situations.

Conclusions

This dissertation set out to examine fish and wildlife management, an arena of great importance to many American Indian nations in subsistence, economic and cultural realms. My analysis focused on what happens when tribes exercise self-determination in this CPR arena which requires them to interact with state and federal governments as well as with markets. One key question centered on what institutional forms tribal management takes when attempting to operate in these complex contexts. Although classic Weberian thought predicts that as societies modernize their governance structures will become more bureaucratic, this study finds significant evidence that this transition need not be inevitable, necessary, or necessarily advantageous. In managing their own fish and wildlife populations, tribes demonstrate self-determination, resourcefulness and innovation in utilizing varying institutional forms to respond to management needs, including responding to various stakeholders with power to influence tribal resources. Tribal fish and wildlife management among these cases demonstrates elements of both clan and bureaucratic governance structures. Although some cases lean more heavily on one or the other, all cases incorporate elements and logics from both clan and bureaucratic ideal types. Furthermore, there is evidence to suggest that there is transition from more bureaucratic structures to more clan-like structures while maintaining certain aspects of each. These hybrid structures both help tribes manage mobile, common-pool resources in highly complex contexts as well as create unusual inconsistencies and challenges in management.

In addition to the forms these structures take, I was interested in other conditions that supported tribal management and the effects of tribal management itself. Many conditions described at length in Chapter Five are included in recipes for tribal management, healthy fish and wildlife populations and economic revenue from management programs. These conditions matter in context, in various combinations, as there are multiple pathways to any one outcome.

Implications for Leaders and Managers

For Tribal Leaders and Managers

Given the hybrid governance structures utilized by tribal fish and wildlife programs and the proceeding discussions of conditions that help tribes meet various management goals—including tribal management itself, healthy populations and economic revenue—there are several points of consideration for tribal leaders wishing to enact policy or practices that will support tribal fish and wildlife management. While it is difficult to generalize from a relatively small and diverse set of cases, my research suggests that those nations that are running effective fish and wildlife programs are paying attention to at least the following points:

- They are proactive and assertive in the natural resources arena. This includes working towards increased management control of fish and wildlife programs, pushing jurisdictional boundaries, setting clear strategic goals that move management beyond past practices or conditions (e.g. improving revenues, improving population or ecosystem health, incorporating cultural concerns, etc.), and moving beyond crisis management. This is really about *putting sovereignty*

into practice rather than leaning on sovereign rights when under the gun.

Additionally, as noted in earlier chapters, many tribes would like to have their own programs, but have not sought the responsibility; consequently there are tribal lands where no tribal management is in place despite intentions and legal opportunity. State and federal governments are not likely to pressure tribes to take over management. If tribes are interested in managing and managing well, they must act—as opposed to react—on their own behalf.

- They work hard to hire and retain qualified staff. They set up the institutions that will enable and encourage staff to remain with the tribal programs for a long time. These include promotional opportunities, continuing education, work flexibility, and civil service codes. Perhaps most importantly, they consider whether practices in tribal government (formal or informal) produce high employee turnover, such as a mass firing of staff when a new chairman is elected; where this is the norm it is impossible to continually retain experienced staff.
- Where they favor staffing by tribal citizens, they develop opportunities for tribal citizens to gain the education or experience needed to become qualified staff through scholarships, internships, on-the-job training and so on.
- They work hard to encourage employee dedication, and this is being done through similar practices that also encourage staff longevity. Among these programs, dedication is a manifestation of employee satisfaction with their work and at the same time, employee dedication serves tribal management programs in a variety

of ways—from everyday attention to effectiveness to perhaps years of unpaid service to the programs.

- They pay close attention to the regulation of tribal citizen activity. Formal regulations mean very little if the people are not invested in them. That is, there is evidence to suggest that where formal regulations reflect cultural understandings of fish and wildlife regulation, they will be more effective. When dramatic departures from cultural norms have been made, management has had more success if the people are well-informed and involved in the process of developing new regulations.
- They think strategically about the goals of the management program: Does the tribe want to earn significant revenue from its fish and wildlife programs? Does the tribe want to reserve its fish and wildlife resources exclusively for tribal citizens? Does the tribe want its programs managed entirely by tribal citizens? Does the tribe want to increase its management influence outside of reservation boundaries? Although there is significant variation, tribes with successful programs have some vision of what they would like their management programs, and their communities, to look like in the future.
- They create legally sound fish and wildlife codes which, at best, reflect the priorities of the tribe in terms of both citizen and non-citizen activity. Such codes increase the legitimacy of the tribal programs in the eyes of outsiders and give legal backing to any fish and wildlife dispute that may arise.

- They develop and support legitimate and effective institutions for dispute resolution, most often through a tribal court, but also for some tribes through a traditional court.
- Tribal leadership supports tribal fish and wildlife programs without interfering in their administration. This is done by providing appropriate decisions about resources, hiring and firing managers, and long-term visions for the tribe and so on. For these tribes, tribal leaders should leave day-to-day operations in the hands of program managers, those qualified people hired for just this purpose.
- When tribal governments provide some funding to tribal fish and wildlife programs, they enable their programs to match federal and other grants they would not be eligible for otherwise. Grant-funded program staff also emphasized that obtaining grants increases the likelihood of successfully obtaining future grants, building success upon success.
- They support the attainment of proper training and certification for conservation enforcement officers and dispatchers so that they are well-prepared to handle fish and wildlife matters. Additionally, for these tribes, training and certification have legitimated their authority and smoothed relations with other (state or federal) enforcement agencies.
- For some tribes, simply the *appearance* of enforcement authority has gone a long way when they invested in braded gear for their conservation officers.
- Some tribes have benefited from inviting graduate students or university scholars to do their research with tribal staff or on tribal management issues, with tribal

oversight or approval a condition of this work, or they have benefited from utilizing local or regional universities as support for biological studies or as expert neutral parties in interacting with state or federal agencies.

For State and Federal Governments

In addition to tribes, state and federal governments also have interests in and benefit from effective tribal fish and wildlife management. Fish and wildlife are mobile resources with a tendency to ignore jurisdictional boundaries. Good tribal management of these resources should be of benefit not only to tribes but more generally to the resources themselves and, therefore, to state and federal governments.

This illustrates a point that Harvard Project and Native Nations Institute research has found more generally: effective tribal governance tends to benefit non-Indian communities. Improved tribal governance tends to lead to stronger reservation economies; these in turn yield decreases in welfare recipients, lighter taxpayer burdens, more job opportunities for non-Indians, and other benefits to regional economies (Cornell 2001).

All of this suggests that state and federal agencies should view tribes as critical partners in the effective management of fish and wildlife resources and should support the strengthening of tribal governments and the expansion of tribal governance capacities. Indian nations with significant fish and wildlife resources want to be decision-makers about—and effective stewards of—those resources. State and federal governments should want them to succeed.

Implications for the Common-Pool Resources and Organizational Literature

A large body of common-pool resources research over the past few decades offers us a wide array of conditions that may be important to successful governance over CPR resources. However, the necessity and sufficiency of these conditions have remained unclear. Additionally, although multiple causality is a factor in the real world, the CPR literature offers little understanding about the importance of combinations of conditions and of causal complexity. Some CPR scholars argue it is now time to move beyond the identification of conditions to a greater understanding of the effects of context and multiple causality on resource management. I have attempted to contribute to this development by employing both case study and survey data in a qualitative comparative analysis, the leading analytic method for examining causal complexity. Through fuzzy-set QCA, I have been able to identify some necessary and sufficient conditions for effective fish and wildlife management. In particular, adequate funding and efficacious courts are sufficient or usually sufficient for maintaining healthy wildlife populations. Further, tribal management itself, high employee dedication, strong clan logics, and tribal jurisdiction over non-tribal citizens are all necessary conditions for revenue or significant revenue from fish and wildlife programs. I also have tried to move beyond simply identifying complex combinations of conditions and provide American Indian nations with some idea of where they might focus energy and attention as they try to build fish and wildlife programs that serve their long-term goals. Part of this was through categorizing conditions as those over which tribes can exercise a great deal of control and those over which they can exercise relatively little control. This allows us to consider

some practical ways tribes and more centralized governments can promote resource sustainability and consider the political, economic and cultural issues that accompany CPR management.

This research has also provided some evidence to suggest that as tribes are better able to determine their own management and governance paths, elements of clan structures and logics develop where the organizational literature would predict they would not. Studying tribal fish and wildlife programs in particular offers an examination of these clan-like features typically found only on the societal fringes, and Native nations are by no means marginal groups: they play significant economic and political roles in a large number of states, particularly in the western U.S. and particularly in regard to natural resources. Their actions affect resource management and use—not only in the fish and wildlife arenas—in consequential ways.

Even more interestingly, this dissertation research has demonstrated that there are different governance structures, or logics, co-existing and operating in hybrid forms. For tribes, these hybrid structures create some challenges and inconsistencies that more pure governance structures would not. Nevertheless, these hybrid structures also allow for flexibility and effectiveness in responding to the diverse stakeholders invested in or influencing tribal fish and wildlife management. Although I was able to demonstrate the existence of these hybrid structures and examine some of the strengths and weaknesses of these forms, predicting where these hybrid structures rather than more pure forms will develop is an endeavor too large for this dissertation and would be more appropriate for future research.

APPENDIX A:
INTERVIEW SCHEDULES

Appendix A.1: Interview Questionnaire for Tribal Employees

This is an open interview. I'm here to figure out how fish and game management works. Please tell me about the fish and game program:

[History]

- What year did this program start?
- How did it start? Who was involved (officials, community members, others)? What was this process like?
- Did it evolve from something FWS ran before?

[Goals/Activities]

- What are the goals of the program?
- How does the program work to achieve those goals?
- If the program is consistently achieving those goals, what are the keys?
- If the program has difficulty sometimes achieving those goals, what gets in the way?
- How does the program measure how well it is doing?
- What specific species, activities, and natural resource issues does it cover in its operations?

[Organization]

- Please describe the organization of the program. What are the major parts of it?
- How are major decisions made about program operations? Do a lot of program decisions get made by some other part of tribal government, or does the program make most of its own decisions about how things are done?
- To whom does the head of the program report?
- What is the relationship between the program and the tribal council or the tribal chair or president? Are councilors involved in how the program is run? How often—if at all—do the managers of the program report to the council or to the chair or president on what the program is doing?
- Is the program closely managed by the council or other parts of tribal government, or is it relatively independent? Why?
- Does the manager of the program control hiring? Is that affected by the council? Is there a civil service code of some sort?
- If the program could be organized in an ideal way, would there be any changes? What would that look like?
- Is there a fish and game program—in another Indian nation or elsewhere—that serves as a model for this program? Is this program a model for other programs?
- How has this program evolved over time? If FWS ran it before, what have been the changes to the program since it became tribally run?

- What are the biggest pressures or challenges that the program faces? What strategies are being used to respond to those pressures or challenges? Are these pressures or challenges unique to this program's situation, or are they common to many fish and game programs in Native nations?
- Is this program distinctive among Native nations? Why?

[Access/Process]

- What are the requirements for tribal-citizen hunting/fishing on tribal lands (fees, permits, etc.)?
- Are non-tribal citizens allowed to fish or hunt on tribal lands? What are the requirements for them?
- Does the tribe have a written fish and game code?
- If so, how is that code enforced for tribal citizens?
- How is it enforced for non-citizens?
- Is enforcement effective? If not, what are the key issues affecting enforcement?

[Funding/Revenue]

- What is the annual budget of the program?
- How is the program funded?
- How much of the funding comes from outside of the tribe?
- Do funding sources affect what can be done? (For example, does a particular funding institution dictate the types of activities that can be done?)
- Does the program generate any revenue? How does it do so? How much does it generate annually? What is this revenue used for?
- Does current funding meet program needs?
- Does the fish and game program compete with other programs for attention/funding within the tribal government?
- Does the program spin off financial benefits to other tribal individuals or businesses (for example, by hiring guides, buying supplies, renting boats, etc.)?

[Human Capital]

- How many people are employed by the program? In what types of jobs? What are their qualifications? Are they Indians? Are they citizens of the tribe?
- Please describe the hiring process.
- Is there either tribal or Indian preference in hiring?
- Does current staff meet program needs (in terms of both numbers and abilities)?

[Inter-Organizational Issues]

- Does this program currently have working relationships of some sort with state or federal organizations or with other non-tribal organizations? Does it ever work with other tribal organizations (within your tribe and other tribes)?
- If so, what have these experiences been like? What have been the challenges/benefits?
- How is the program affected by state/federal regulations?
- Is the program affected by non-tribal landholders within the reservation or nearby? If so, how?

[Community/Other Effects]

- What are the primary contributions this program makes to the tribal community?
- Do community members affect what happens with the program? (Do they volunteer, vote on these issues, offer feedback, etc.) How?
- Is there anything else I should know about your program and how it runs?

APPENDIX A:
INTERVIEW SCHEDULES

Appendix A.2: Interview Questionnaire for Hunters and Fishermen

This is an open interview. I'm here to figure out how fish and game management works. Please tell me a little about you and the fish and game program:

[Respondent]

- Are you a hunter or fisher or bird/wildlife watcher?
- What do you hunt/fish/like looking for and how often do you go?
- Why do you hunt/fish/wildlife watch?
- Do you ever hunt/fish off-reservation? Why/why not?

[History]

- Do you remember how the fish and wildlife management programs started and who was involved? (Please don't tell me the names of individuals, just their roles in the process.)
- Was there a lot of community support and, if so, how? If not, why not?
- How has this program evolved over time? If FWS/BIA ran it before, what have been the changes to the program since it became tribally run? Why?
- If formerly FWS/BIA run, what are the changes in the response from tribal members since it became tribally run?

[Goals/Activities]

- What are the purposes of the fish and wildlife programs?
- How well are the programs running? Why?
- What/where is the ideal hunting/fishing/wildlife viewing area? How close are your hunting/fishing/wildlife viewing spots to this?
- Are any of the animals sacred or of spiritual significance?
- Do tribal members vote on issues related to hunting/fishing/wildlife or bird management? Do tribal members influence the program in other ways? Do non-member residents vote or influence the programs? (For example, are there community meetings, non-governmental organizations, or other ways individuals and groups voice their opinions about hunting/ fishing or other wildlife issues?)

[Access/Process]

- Have you ever heard of people not following wildlife/fish management regulations on the reservation? If so, have you heard of it happening often? Have you heard of those doing it being tribal members or non-members? Have you heard how they are able to do so? Do members ever grant access to non-members unofficially? What are the effects of this?
- What happens to someone if they break these laws? Have you heard of community members reporting illegal hunting and fishing? [This might depend on who is breaking the laws: members or non-members.]

- Have you heard of tribal members concerned about illegal hunting and fishing? Have you heard of non-members concerned about illegal hunting and fishing?
- Have you heard of members ever benefiting from illegal hunting and fishing?

[Inter-Organizational Issues]

- Are you aware of any non-tribal organizations involved in your tribal fish and wildlife programs? What is the relationship between non-profit organizations and these programs?

[Community/Other Effects]

- How are the tribal nation and its members affected by these programs? How are non-member residents affected by these programs?
- Do community members affect what happens with the program? (Do they volunteer, vote on these issues, offer feedback, etc.) How?
- Is there anything else I should know about your program?

APPENDIX B:
SURVEY INSTRUMENT

Management Strategies for Tribal Fish and Game Programs Survey¹⁰⁷

Thank you for participating in this survey. Your participation is voluntary and anonymous. Neither your name nor any other personally identifying information will be recorded or kept with your survey responses. (The first 4 questions below will be separated from the rest of the survey data.)

1. Are you an enrolled tribal member or Alaska Native?
 - Yes, of the _____ (please give tribal name/s)
 - No

2. Are you employed by a tribe or an Alaska Native Corporation/Community?
 - Yes, of the _____ (please give tribal name/s)
 - No

3. If you are employed by a tribe or Alaska Native Corporation/Community, what is your job title?

4. Why are you a member of the NAFWS? (Please check all that apply.)
 - I am a tribal or Alaska Native Corp./Community employee whose job relates to fish and game.
 - I am a tribal member/Alaska Native interested in fish and game management issues.
 - I work for the state or federal government and my job relates to fish and game.
 - I am a non-tribal member interested in fish and game management issues.
 - Other (please specify) _____

Please answer the following questions about the tribal/Alaska Native program with which you are most familiar. (If you are familiar with more than one tribal program, please fill out a separate survey for each.) Circle below the tribe you have in mind for answering these questions:

my own tribe the tribal program I work for another tribe

5. What wildlife does the Tribal program manage? (Please check all that apply.)

¹⁰⁷ Please note the formatting for this appendix has been slightly altered from that of the original survey administered to participants.

- Various Fish
- Deer
- Elk
- Moose
- Bear
- Wild Turkey
- Antelope
- Duck
- Dove
- Geese
- Pheasant
- Quail
- Various Seabirds
- Rabbit
- Squirrel
- Whale
- Seal
- Sea Lion
- Walrus
- Turtle
- Other (please specify) _____
- None: our wildlife is not managed by the Tribe.

6. Does the Tribe have a healthy fish and/or game population?

- Yes
- No

Feel free to explain your response: _____

7. Is this Tribal fish and game program run entirely by the tribe?

- Yes
- No

8. If you answered “yes” to question #7, and this fish and game program is run entirely by the Tribe, what year did it begin being run solely by the Tribe?

Year Tribe began having sole control: _____

9. If you answered “no” to question #7, and this program is not run entirely by the Tribe, who else is involved?

- Bureau Of Indian Affairs (BIA)
- U.S. Fish and Wildlife Service (USFWS)
- State Fish and Wildlife Departments

- Tribal coalition/Alaska Native Village Coalition
 Others (please specify) _____

10. How would you rate the Tribe's support for the fish and game department?
(Please circle the rate on a scale of 1 to 5, with 5 being the highest rate of support.)

1 2 3 4 5

11. Please list in order of importance the biggest challenges to the fish and game program:

1. _____
2. _____
3. _____
4. _____
5. _____

(Feel free to include others.)

12. Please list in order of importance the main goals of the program:

1. _____
2. _____
3. _____
4. _____
5. _____

(Feel free to include others.)

13. Overall, is the fish and game program meeting these goals?

- Yes
 No

14. Please list in order of importance the main benefits of the program:

1. _____
2. _____
3. _____
4. _____
5. _____

(Feel free to include others.)

15. What are the main funding sources for the program? (Please check all that apply.)

- Federal grants
 Other (non-federal) grants
 Revenue from hunting/fishing equipment and/or licensing fees
 Other tribal revenue sources
 Other (please specify) _____

16. What would be an estimated amount of annual funding required for the program?
Please provide an annual figure: _____
17. Is the program adequately funded?
 Yes
 No, it ideally needs approximately _____ more annually.
18. What would be an estimated amount of annual revenue earned from the program?
Please provide an annual figure: _____
19. Does the program have a fish and game code of regulations?
 Yes
 No
20. Does the program have its own biologists?
 Yes
 No
21. Does the program have its own law enforcement?
 Yes
 No
22. Are the law enforcement officers properly trained to enforce the code and applicable federal regulations?
 Yes
 No
23. Is there proper training available that meets the officers needs?
 Yes
 No
If no, do you have suggestions to meet this need? _____
24. Who can hunt the Tribal game? (Please check all that apply.)
 Tribal members
 Non-members who reside within the reservation
 Off-reservation non-members
 Other (please specify) _____
25. Who can fish in Tribal waters? (Please check all that apply.)
 Tribal members
 Non-members who reside within the reservation
 Off-reservation non-members
 Other (please specify) _____

26. What kinds of restrictions are there on Tribal member hunters? (Please check all that apply.)
- Time of year
 - Place
 - Quantity
 - Species
 - Fees
 - Other (please specify) _____
27. What kinds of restrictions are there on Tribal member anglers? (Please check all that apply.)
- Time of year
 - Place
 - Quantity
 - Species
 - Fees
 - Other (please specify) _____
28. If non-members can hunt, what kinds of restrictions are there for non-member hunters? (Please check all that apply. Leave blank if non-members cannot hunt.)
- Time of year
 - Place
 - Quantity
 - Species
 - Fees
 - Other (please specify) _____
29. If non-members can fish what kinds of restrictions are there for non-member anglers? (Please check all that apply. Leave blank if non-members cannot fish.)
- Time of year
 - Place
 - Quantity
 - Species
 - Fees
 - Other (please specify) _____
30. Have you ever heard of members hunting or fishing illegally on the reservation?
- Yes
 - No
31. If the answer was “yes” to question 30, is this a big problem?
- Yes
 - No

32. What are the penalties for members who break these laws? (Please check all that apply.)
- No penalty
 - Fine
 - Restricted access to future hunting and fishing
 - Confiscated fish/game
 - Jail
 - Other (please specify) _____
33. Have you ever heard of non-members hunting or fishing illegally on the reservation?
- Yes
 - No
34. If the answer was “yes” to question 33, is this a big problem?
- Yes
 - No
35. Are there mechanisms set-up for dispute resolution over illegal hunting and/or fishing?
- Yes
 - No
36. If there is a Tribal court that oversees these disputes, about how many cases involving hunting or fishing issues are there per year? _____
37. How would you rate the Tribal court system in their ability to prosecute fish and game violations? (Please circle the rate on a scale of 1 to 5, with 5 being the highest rate of ability to prosecute.)
- 1 2 3 4 5
38. What are the penalties for non-members who break these laws? (Please check all that apply.)
- No penalty
 - Fine
 - Restricted access to future hunting and fishing
 - Confiscated fish/game
 - Jail
 - Other (please specify) _____

39. Have you ever heard of any informal processes of enforcement that occur? (For example, do people discourage each other, is there a culture of respect for these laws, do people turn others in, etc.?)
- Yes
- No

40. If the answer was “yes” to question 39, please list any processes you have heard of:

(Feel free to include others.)

41. How many people are employed by the Tribe for the fish and game program and/or natural resources department? _____
42. What is the position title of the person who runs the Tribal program that manages fish and game? _____

If you are an Alaska Native or work for an Alaska Native Corporation or Community, and you feel this survey does not sufficiently address management of your fish and game, please consider contacting Jamie Dolan, either directly at jdolan@u.arizona.edu or through NAFWS.

If you would you be interested in having your fish and game program be more involved in this study and would like to leave your contact information, please do so in the space below or contact Jamie Dolan, either directly at jdolan@u.arizona.edu or through NAFWS.

43. Do you have any other information you would like to share regarding your tribal fish and game program operations?

**APPENDIX C:
QUALITATIVE CODING TREE NODES**

Node	Sub-Node	Sub-Sub-Node
Activities		
	Ceded land management; usual and accustomed areas management	
	Co-management & cooperation	
	Decision making	
	Enforcement: responsibilities & activities	
	Hiring and firing	
	Litigation	
	Management activities (general)	
	Modeling after others; leading others	
	On-the-job training	
	Tribal authority asserted; self-determination	
	Varied responsibilities	
Actors		
	BIA	
	Committees & commissions (fisheries, wildlife)	
	Council	
		Council: accessibility
		Council: longevity
		Council: operations
		Council: proactive environmental support
		Council: program involvement
		Council: structure
	Counties	
	Cultural or elder committees	
	Employees	
		Employee longevity & retention
		Employees or leaders: upcoming (&support for)
		Human capital (what exists, what needs

		remain)
		Importance of member employees
	Enforcement officers	
		Enforcement: authority
		Enforcement: equipment
		Enforcement: human capital (incl. cross-deputization)
	Guides	
	Individuals & leaders who are significant	
	Inter-tribal relations	
	NAFWS	
	Non-Indian employees	
	Other federal relations	
	Public involvement in management	
	States	
	Tribal court	
	Universities	
	US FWS	
Attitudes		
	Determination; dedication; persistence	
	Pride & hope	
Challenges		
	Challenge: institutional challenges to tribal authority	
	Challenges to management (general)	
	Conflict between citizens and non-citizens; misunderstandings	
	Contention within tribe	
	Creation of need for fish & wildlife management	
	Double-standards; unfairness	
	Enforcement: general challenges & needs	
	Funding concerns & challenges	
	Human-made attacks on fish & wildlife	
	Informational challenges	
	Poaching & trespassing	
	Pressures on program	

	Racism; harassment; ignorance	
	Regulation (or lack of) challenges	
Characteristics of program or tribe		
	Allotment	
	Beginning of program	
	Civil service code	
	Funding sources	
	Paradise	
	Professionalism; program development	
Culture		
	Cultural changes	
	Cultural match; traditional management; cultural influence	
	Cultural & social importance of fish & wildlife	
	Organizational culture	
	Sense of belonging to place	
	Subsistence & relationship with fish & wildlife	
Help for management		
	Deterrents to breaking fish & wildlife laws	
	Enforcement: general help for	
	Help for management	
Ideological positions & visions		
	Goals & objectives	
	Perceived federal responsibility toward tribes	
	Vision or image of program	
Jurisdiction		
	Jurisdictional issues	
Outcomes		
	Backlash for tribal actions	
	Economic benefits perceived or actualized	
	Enforcement & regulation compliance	
	Enforcement: signs of success, achievement	
	Other benefits of management	
	Power leads to more power	

	Resources & resource potential	
	Revenue & other support for other tribal orgs	
	Successes (clear)	
Regulations & rules		
	Closed areas	
	Non-citizen hunting & fishing regs	
	Regulations & licenses (tribal)	
Strategies		
	Enforcement: creating a presence	
	Innovation & unique management	
	Presence, creating a	
	Proactive behavior	
	Techniques for management	
Structure & operations		
	Centralized management	
	Local management	
	Civil & criminal cases	
	Compacting with BIA & Office of Self-Governance	
	Enforcement: operations	
	Flexibility & creativity	
	Form of government	
	Funding structure	
	Organizational structure	
		Clan
		Bureaucracy
		Market
		Hybrid

APPENDIX D:
CHART OF GOVERNANCE STRUCTURES

	Market	Bureaucracy	Clan
Crow	--	Low	High
CSKT	Low	High	High
Yakima	--	Low	High
WMAT	--	High	High
San Carlos	Low	Medium	High
Red Lake	--	Medium	High
Fond du Lac	--	Medium	Medium

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