

TRIGGER POINTS IN MULTIJURISDICTIONAL
NATURAL RESOURCE REGULATION:
A QUALITATIVE CASE STUDY OF THE LAPWAI BASIN

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AUTHORIZATION TO SUBMIT THESIS

This thesis of Lacey Rammell-O'Brien, submitted for the degree of Master in Science with a major in Water Resources, and titled "Trigger Points in Multijurisdictional Natural Resource Regulation: A Qualitative Case Study of the Lapwai Basin", has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies to the College of Graduate Studies for approval.

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ABSTRACT

The Lapwai Basin, located on the Nez Perce Reservation in Idaho, was the focus of two case studies. The first was the Smoke Management Plan, designed to improve air quality during agricultural burn seasons. The second is the Lapwai Basin Ecological Restoration Strategy, which seeks to improve the water quality and related anadromous fish-spawning habitat. This project identified triggers that contributed to the Smoke Management Plan's success and compared them to related circumstances in the watershed restoration. Interviews were collected via a Snowball Sampling Method over a five-month period. Participants were federal, state, local, and tribal agency employees connected to the watershed. While implementation of the Smoke Management Plan demonstrated a trigger point leading to eventual collaboration, the Lapwai Basin does not yet appear to have a trigger. Without it, motivation for collaboration is lower and could impact federal funding opportunities. The entities working to improve the quality of the Lapwai watershed are making positive headway, but will have greater challenges to full implementation.

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DEDICATION

I would like to extend gratitude to my parents for their ongoing love and encouragement.

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CHAPTER 1

Introduction

“What we call water in Nez Perce, is *kuus*. And then *yewic kuus* is cold water. I think the important part of water, to the Indian people, is also a place to gain strength. The power of water was given – the power to be strong.” (Aragon, 2001).

The Nez Perce Reservation, designated by treaties in 1855 and 1863, has borders that lay less than ten miles from the city of Lewiston, Idaho, and spans 770,000 acres (1,195.1 square miles) of land. This total area is the third largest reservation in the state and includes rivers, canyons, and prairies, (Buchanan & Janes, 2011) covering land in Clearwater, Idaho, Lewis, and Nez Perce counties. The reservation has a tribal population of 2,310 tribal members, a fraction of the total population of 18,437 residents living within reservation boundaries. (2010 Census data).

Nez Perce reservation land is subject to what is called “checkerboard jurisdiction” wherein different segments of adjacent land may be subject to differing rules and regulations due to variance in ownership. Historically conflicting federal policies regarding Indian ownership of trust land, including U.S. government oscillation regarding tribal self-determination, created existing checkerboard jurisdiction on reservation land. It also arose out of changing court decisions regarding private and fee land ownership on reservations and historical purchases of trust land by private landowners. The General Allotment Act of 1887, also called the Dawes Act, enabled this outcome. In 1989, the United States Supreme Court ruled in *Brendale v. Confederated Tribes and Bands of the Yakima Indian Reservation* (492 U.S. 408) that tribes have no authority to zone private, non-fee land within the reservation unless the nonmember conduct threatens inherent tribal self-government or internal relations. This decision continues to impact tribes like the Nez Perce through

subsequent legal decisions and legislation. Checkerboard zoning, like checkerboard wildlife management, is inherently unworkable (Tsotsie, 2001), especially for comprehensive plans spanning large areas. It complicates governance for natural resource policy because of the increase of interested entities and differing positions regarding the resource in question.

Lapwai Creek has a drainage area of 264 square miles (USGS National Water Information System). On its way to join the Clearwater River, it flows through checkerboard tribal trust and private fee land. The entirety of the watershed lies within the borders of the Nez Perce Reservation. Any regulations designed to address water quality standards under the Clean Water Act would impact many stakeholders in the area. State, tribal, and federal entities seeking to engage in natural resource policy generally face historical and legal conflicts as they search for solutions.

The Nez Perce and Coeur d'Alene Tribes, in conjunction with their charge under the Clean Air Act's Federal Air Rules for Reservations ("FARR"), created voluntary smoke management plans in 2002, which were made into compulsory smoke management plans for their respective reservations in 2005. The Nez Perce Tribe, in conjunction with the Nez Perce Soil and Water Conservation District, seeks to manage its watersheds for § 303 compliance under the Clean Water Act in much the same way through their Lapwai Creek Watershed Ecological Restoration Plan. As a student of natural resource regulation and the legal jurisdictions in which they work, I have examined and compared these two bodies of natural resource regulation within the Lapwai Basin.

Using the framework of collaborative governance and the evaluation of trigger points within my case study, this research explored how tribal governments assert and maintain regulatory control over natural resources throughout checkerboarded jurisdictions despite

conflict with other governmental entities and stakeholders. I interviewed government employees whose positions bring them into contact with the Lapwai Watershed. The anticipated water quality regulations have presented insights into the process, challenges, and successes government officials face in regulating natural resources. From a series of interviews, I have drawn conclusions for future government agencies operating under jurisdictional complexities.

CHAPTER 2

Literature Review and Background

Many scholars have explored the social aspects of collaboration and natural resource regulation. This literature review summarizes prior research and develops the central topic for my own project, specifically exploring the theoretical framework of collaborative governance and developing the concept of trigger points from previous works. It also provides historical background for my Lapwai Basin case studies.

Collaborative Governance.

This section will provide background and context for the theoretical framework of collaborative governance.

Framework: Collaborative governance is an “inclusive and collaborative approach [which] confronts numerous aspects of the challenges of representation, public learning, and process design in governance” (Boswell, 2005, p.94). It has arisen as a model “in response to growing failures of scientific management as a means of advancing common interests” and as a way to tailor policy to the needs of a specific area and its communities (Brunner, 2010, p.301). Collaborative governance attempts to address public problems too complex for a single organization to handle, and thus relies on the collaboration of multiple groups, whether public, private, or not-for-profit (Page, 2010).

Collaboration emerges as a major factor in cross-jurisdictional and multi-jurisdictional regulation, as well as a significant indicator of the success for that regulation. Governance employs mediation behavior via values, norms, and laws (Rogers and Hall, 2003). The ultimate aims of collaborative governance are to “create institutions that can bring together a range of stakeholders and knowledge, commit to action at the necessary

spatial and temporal scales, and evolve as demands and circumstances change” (van der Meer, 2004; Edelenbos 2005). Collaborative governance also finds ways to support multiple policy instruments, communication methods, participation processes, and timelines (Guerin, 2007). Coordination and integration are typically the largest challenges of policy makers utilizing the approach (Guerin, 2007). The framework can be identified from “four immediate or first-order results: reciprocity; relationships; learning; and creativity” (Fish et al., 2010, pg 5626). Collaborative governance, especially when initiated between state, non-state, commercial, and non-profit stakeholders was “born out of the participants’ pragmatism” and “capacities in leveraging improved outcomes for all concerned” (Zadek, 2007, p. 6).

Collaborative governance scholars claim that governments are better equipped to handle change when they have cooperative legislation, financial incentives, or other bridging organizations at their disposal (Folke, 2007). Additionally, when the administrative process model features “parties [who] share responsibility for all stages of the rule making process,” effectiveness and legitimacy appear to follow (Freeman, 1997, p.6). Effective collective action is characterized by challenging entrenched attitudes and practices, overcoming organizational resistance to change, and mobilizing individuals to engage with environmental problems (Fish et al., 2010).

Collaborative governance assists protective natural resource actions when “stakeholders share power to design and deliver policies and programs, some group of them must act jointly to nurture and maintain a governing coalition, and negotiate and monitor authority for implementation” (Page, 2010, pg. 247). Also influential in predicting the success of collaborative governance is a “political will to tackle pressing problems and civic capacity to devise new ways to address them” (Page, 2010, pg. 261). Additional factors in

successful collaborative governance include social learning and collaboration between parties, strong leadership and facilitation (Tippet 2005, Mostert et al., 2007 as cited by Pahl-Worstl et al., 2007). Leadership is used here to identify those people or organizations “which can mobilize energies, generate trust, give vision, and support the collective finding of a clear direction in a multiparty process” (Pahl-Wostl et al., 2007, pg. 5).

Alternatively, collaborative governance can prove ineffective where there is lack of accountability, as well as where there are lack of explicit rules resulting from informality between the parties (Pahl-Wostl, 2007). Some assert that collaborative governance is a euphemism for increased governmental control, keeping certain groups from equal participation (Carmel & Harlock, 2008). It can also be derailed by shifting demographics, changes in which groups are involved in the decision-making, or where there is a shift in priority or end goal (Scholz & Stiftel, 2005). Power shifts within a collaborative governance group can also impede dialogue. If the governance groups get too large, there may be less personal trust and an increased deliberation time before decision making, which can hinder progress and thereby affect the parties’ belief in the effectiveness of the process (Scholz & Stiftel, 2005). The adaptability of the approach sometimes “sacrifices some of the localized efficiency of stable first-order institutions in order to encourage exploration of greater global efficiencies” (Scholz & Stiftel, 2005, pg. 10). Finally, decentralized governance structures can end in fragmentation with an “assumed negative impact on performance” (Pahl-Wostl et al, 2012, pg. 29).

Collaborative Governance and Federalism: Collaborative governance interfaces well with the American governmental structure known as “cooperative federalism”. Established by the United States Constitution but expanded by President Theodore

Roosevelt's New Nationalism movement and President Franklin D. Roosevelt's New Deal, cooperative federalism relies on the cooperative interplay between local, state, and national governments on different levels of authority and control (Boyd, 1997). By design, Federalism is the distribution of power between the federal government and the states or Indian tribes (Fischman, 2006). Federal power can limit or incentivize certain actions through grant funds for state governments, but in certain areas it is not allowed to coerce or commandeer compliance.

The Clean Water Act ("CWA") is based on the Federal Water Pollution Control Act ("FWPCA") Amendments of 1972. These initially required the EPA to set nationwide limits on industrial source discharge. Its subsequent amendments also established the National Pollutant Discharge Elimination System ("NPDES") permit program, as still in place. From 1973 to 1975, after the creation of FWPCA, the Environmental Defense Fund and four other environmental groups brought four separate lawsuits against the EPA for failing to implement several of its FWPCA provisions (*Environmental Defense Fund v. Costle*, 636 F.2d 1229, 1234 (D.C. Ct. App. 1980)). Several chemical, rubber, and steel industries administratively appealed these edits, later bringing suit against the proposed amendments in *Natural Resources Defense Council v. Train*, (8 ERC 2120, 2122 (D.C. Ct. App. 1976)). The U.S. District Court held the FWPCA amendments were reasonable, and the EPA continued with its strategy for the regulation of toxic pollutant discharges. These same amendments were later codified by Congress to become the Clean Water Act of 1977.

The EPA statutes, like the CAA and CWA, give primary control to the states with federal oversight and protection. This creates a need for collaboration, especially where transboundary natural resources are concerned. This interconnectivity among the individual

independence of local, state, and tribal governments is a “[m]ulti-level governance in polycentric systems [that] implies decision-making authority is distributed in a nested hierarchy and does not reside at one single level” (Pahl-Wostl et al., 2012, pg. 27). Where federal, state, local, and tribal entities can take cohesive action, increased probability of enforcement and regulation success may likely result under the guise of a coordinated federal program. Without enforcement, environmental standards and regulations act as mere recommendations (Reisinger, Dougherty & Moser, 2010).

In terms of pollution control in environmental regulations, “cooperative federalism largely operates to facilitate the creation of state programs and state substantive standards. When applied to natural resource management, the use of cooperative federalism results in three additional approaches: place-based collaborations, state favoritism in federal process, and federal deference to state process” (Fischman, 2006, pg. 182). Largely a byproduct of a lack of federal interference, the result is generally based on the size and location of the proposed regulation and resource. The model is “intended to streamline the administrative process, spread the burden of enforcement, and allow states more autonomy to customize their implementation plans without compromising the goals” of the overall program (Reisinger, Dougherty & Moser, 2010, pg.7). Some scholars, however, assert that this creates an unlevelled playing field for states that each face individual budgetary and enforcement challenges (Hodas, 1995).

Trigger Points.

This section will utilize a working definition of crisis points from collaborative governance literature while establishing how it applies within the realm of historical natural resource conflicts.

Crisis points are events or circumstances that compel people to decide to regulate a resource, and accordingly, their own behavior regarding that resource. A real or perceived crisis “can trigger mobilization of social capital and social memory and may result in new forms of governance systems with the ability to manage dynamic ecosystems and landscapes” (Folke 2005, p.455). The resulting actions typically occur on a community level, with interactions designed to clarify shared needs (Brunner 2010).

Throughout this research, I found that “crisis” has a distinctly negative connotation, whereas the phrase “trigger points” more accurately conveyed the idea of a situation prompting community and governmental reaction, whether positive or negative in its scope. Consequently, I found the use of “trigger points” was more precise for the conclusions drawn in this project. I used it in place of the established “crisis points” terminology throughout this document.

Trigger points generally arise during disagreements about the appropriate current or future use of a shared resource among groups of stakeholders. Conflicts between Indian society and non-tribal society not only contest ownership and control over land, but also may test cultural concepts of the land itself through contrasting perspectives on land use (Grossman, 2003). Tribal governments historically have had difficulty exerting control over tribal lands, especially those sold to private landowners during periods of U.S. history where the Federal Government did not hold such lands in trust. Federal laws and Supreme Court

decisions have also impacted tribal authority. Two such decisions, *Oliphant v. Suquamish Indian Tribe* (435 U.S. 191 (1978)) and *Brendale v. Confederated Tribes* (492 U.S. 408 (1989)), prevented tribal criminal jurisdiction and denied tribes zoning authority over non-Tribal fee lands within the reservation respectively. The “Court has used language reflecting a view that nonmember Indians are outside the “natural” tribal community” (Goldberg-Ambrose, 2001, p.1129), raising further complications for tribal authority. Furthermore, in *Montana v. US*, 450 US 544 (1981), the Supreme Court held that the Crow Tribe of Montana had no authority to regulate non-Indian hunting and fishing on fee lands owned by non-Indians within the boundaries of a reservation. The Court also held that tribal power can only be exercised to protect tribal self-government or to control internal relations, and any action taken beyond that scope can only be allowed through express congressional delegation. This limited not only the Crow Tribe’s ability to govern on its own reservation, but the power of all Indian tribal governments seeking to act beyond the capacity of self-protection. It also requires express involvement of the federal government in tribal government actions, placing the burden on the Tribe to establish and potentially justify motives for governmental choices. These legal decisions bind all Indian Tribes within the United States, and continue to impact the jurisdictional options that tribes have available to them.

While county, state, private, and tribal interests consistently seem to clash, there are instances where tribal and non-tribal entities have allied to address a common problem. Perceived threats to land and lifestyle – for example, a proposed coal or uranium mining project – can lead to a common goal and therefore a partnership despite historical opposition between tribal and non-tribal peoples (Grossman, 2003). Similarly, dams built on salmon migration paths on the Columbia temporarily united several previously opposed interest

groups – “by posing a threat to the continuation of the runs [...and] to fish, [dams] posed a danger to all fishers on the river. This common danger forced occasional truces between Indians, sportsmen, and commercial fishers for a greater share of the catch. A common adversary forced them, along with biologists and fishery managers into a shaky and uneasy alliance to save the fishery itself” (White, 1995 p. 92). In these examples, the perceived threats were the trigger points that lead to the subsequent collective actions.

An open recognition of past conflicts, as well as the continued identification of conflicts during the planning process, urges mutual learning and encourages collaborative problem solving. When tribes do establish relationships with neighboring non-Indian farmers or ranchers, the resultant alliances have been extremely effective in meeting their environmental goals. Where tribes had only the backing of environmental groups or non-local non-Indian communities, the alliances were unsuccessful (Grossman, 2003). Regional agreement is generally more effective than issue-specific alliances (Grossman, 2003).

The unspoken issue facing many tribes seeking collaboration is entrenched racism. Tribes tend to have regulatory success with a combination of confronting this racism while leaving the door open to cooperation that points to a more inclusive future with surrounding communities (Grossman, 2003). Tribal governments often carry a clouded past, with features historically imposed by outside sources that may fit poorly with their communities’ current needs and values (Evans, 2011; Alfred, 1999; Biolsi, 1992; Cornell & Kalt, 1992). There is evidence that cooperation over natural resources helps, not only with natural resource protection, but also with the assertion of tribal sovereignty (Grossman, 2005). Institutions matter for effective tribal governance, (Cornell & Kalt, 1992) and access to necessary information improves where budget constraints are loosened (Hall & Deardorff,

2006). However, both can be put under pressure where there are the dynamics of racial conflict and organizational exhaustion, especially “in settings with entangled Indian and non-Indian lands” (Evans, 2011). It is a difficult challenge for tribes seeking to assert their sovereignty to face both past and present racism while trying to protect the interests of their constituents and tribal members.

What the literature demonstrates is that collaboration can exist in previously uninterested communities when there has been an event that implies that there is a problem that those communities can resolve together. The trigger point appears to be the impetus for collective action, which may take the form of collaboration. While collaborative governance is not the solution to every natural resource policy problem, its flexible framework and inherent adaptability may prove beneficial for complex problems facing natural resource managers.

Lapwai Basin.

This section provides context on the Lapwai Basin and the Nez Perce Tribe’s efforts to improve the water quality, strengthen spawning salmonid populations, and assertion of jurisdiction over natural resources within the reservation boundary.

The Nez Perce Tribal Watershed Division “is focused on protecting, restoring, and enhancing watersheds and all treaty resources throughout Nez Perce territory, as described under the Treaty of 1855. The goal is to use a holistic approach, which encompasses entire watersheds, ridge-top to ridge-top, emphasizing all cultural aspects” (Fisheries Habitat Watershed Division Vision Statement, revised January 2010). The mission statement appears to be a response to the existing federal, state and Tribal conflicts regarding the management and restoration of Lapwai Creek. This conflict is not unique, as the United

States has struggled to reconcile rational natural resource administration with its pluralist, federalist system of government (Adler, 1995).

The Prior Appropriation Doctrine adds to the confusion in the western states, where the senior water right is the water right that was established first. “Management of western water resources has fostered a complex system for water allocation and regulation, but conflicts over Indian water rights reveal the fact that this system requires further definition” (Folk-Williams, 1982, p.3).

The state and federal government interaction required for environmental-protective regulation shifts much of the discussion of potential legislation under the umbrella of cooperative federalism. Collaborative Governance, as far as a model for cooperation between stakeholders and organizational entities, may provide access to new insights for regulating a shared resource. Lapwai Creek is listed by the State of Idaho under §303(d) of the CWA for failure to support cold-water biota and salmonid spawning, although the creek does in fact support other species of aquatic life. The observed species include minnows, Steelhead, Chinook and Coho salmon, dace, sculpin, and the introduced smallmouth bass. The previous listing, as well as observable modifications to the Creek, is largely what informed my assumption going into this project that the water quality in the Basin is impaired and that entities that interact with the watershed would desire an improvement to the state of the Creek.

As conflicting interests maneuver for control over limited natural resources, environmental assets continue to be impacted. To regulate these resources is to regulate the people who claim ownership to their use. Those regulations should come from the people who will ultimately be subject to them. Much has been written about natural resource

regulation in the United States; how they are managed, how people interact with their natural environments, how all levels of management and governance account for uncertainty in science and people. Despite historical conflicts over jurisdictional oversight, the Nez Perce Tribe has demonstrated success with a previous set of air quality regulations. They now seek to improve the quality of a significant water source present on reservation lands. The Lapwai Basin provides an opportunity to examine these general natural resource regulation rules in a specific area.

CHAPTER 3

Research Question

Considering the extensive research establishing particular rationales and tools that collaborative governance provides for policymakers and managers alike, a gap exists in identifying motivators for multijurisdictional protective natural resource regulations. This inspired the focus of my thesis, and lead to the creation of my directed research question: How important are trigger points to encouraging collaboration between government entities within a multijurisdictional area?

Methodology

My approach is best summarized by Aldo Leopold – “There are two things that interest me: the relation of people to each other and the relation of people to the land.” To understand the relation of people to each other and how they relate to the resources they use, the ‘why’ of both becomes forefront. Why do people choose to regulate themselves? After they have made that decision, why do certain regulations succeed where others fail to garner acceptance? Just as social science often fails to address the practicality component omnipresent within legal structures, straight regulation analysis found in the legal discipline does little to address the uncertain human component of ‘why’. It is within this juncture that my research proposition falls. Interdisciplinarity has been described as both nostalgia for lost wholeness and a new stage in the evolution of science (Klein, 1990), so where a question cannot be adequately addressed or answered by a single discipline, a blending of two or more disciplines can reveal a more comprehensive image of a problem.

While I had no relationship to the Lapwai Basin prior to this project, I have had a long-standing interest in studying government at its various levels. I find federalism

fascinating. I am also passionate about mediation and collaboration as an effective form of problem solving. An undergraduate degree in communication exposed me to the ways qualitative research is conducted to help understand the way our society functions and improve it. I love Idaho and am familiar with its strengths and its weaknesses. After taking a class from Barbara Cosens, I became intrigued by the complexities on the Nez Perce Reservation. I wanted to explore this part of the state, and hopefully create something helpful to the people who call it home. Over the course of this research, I have been emotionally moved by the hard work and earnest intentions of the participants as they to improve their communities through their everyday actions. While Lapwai may not be my home, it will forever have a place in my heart.

Data Collection Methods

I conducted interviews with government employees connected to the Lapwai Creek watershed. After receiving approval from the Nez Perce Tribal Executive Council (Appendix A) and the University of Idaho Institutional Review Board of Human Assurances (Appendix B), I interviewed government and agency employees for the Nez Perce Tribe. I also interviewed federal, state, county, and local non-Tribal government employees publically involved with the Basin, Lewiston Orchard Irrigation District, the Idaho Department of Environmental Quality, and the Environmental Protection Agency. While it would have been relevant to speak to private landowner-stakeholders in the basin, the multi-government limitation focused the results under the collaborative governance model. All together, I conducted ten interviews over a period of five months, from November 2012 to April 2013. (See Appendix E for the interview participant pool.)

Format for the interviews was the snowball sampling method, wherein the interviews ended with the inquiry of “Are there any other (Nez Perce Tribal) government employees that you think I should talk to?” This method is employed until the same names appear repeatedly, suggesting that all major players in the area have been identified and interviewed. This format has already been used within the Lapwai Basin by previous researchers with success.

The focus of the interviews was attitudes and perceptions of the circumstances leading to the creation and enforcement of the two natural resource policies. (See Appendix D for the interview instrument used in data collection.)

I made it a priority to meet participants in person by making appointments in advance, however, three of the interviews were conducted via telephone. Procedures were the same for both; meetings began with an explanation of my research purpose and interest in the Lapwai Basin. Complying with the requirements of the University of Idaho Institutional Review Board, the participants signed the consent form, or in the case of the telephonic interviews, gave the verbal equivalent of their consent.

Demographic information of the participants was not taken, as it had no impact on the outcome of the research. There were two requirements for an individual to be interviewed: first, participants had to be of legal consenting age, and second, participants had to be public employees whose positions put them in contact with the Lapwai Basin watershed.

Each interview was recorded on a digital voice recorder while I took handwritten notes. This information was transcribed into a single typed document. The audio files have been deleted from the recording device to prevent participant identification. Transcripts of

the interviews were then coded, using numbers instead of personal names. I left in proper place names, such as Lapwai, the Clearwater River, and references to agency names for clarity.

Data Analysis

After the collection, transcription, and coding of the interviews, I used three different techniques to see which ideas, concepts, words, and analogies had the highest levels of salience. I entered data into a computer-aided qualitative data analysis software program called HypeResearch, developed in 1990 by Dr. Sharlene Hesse-Biber, T. Scott Kinder, and Paul Dupuis.¹ I compared emergent HypeResearch patterns to my word clouds and Excel spreadsheets. The final product includes coded quotations from individual interviews, presentation of how often an idea or groups of ideas emerged, how those ideas connect or demonstrate disconnect. I concluded my research by comparing my results to existing research.

Case Studies

The Nez Perce Tribe's approach to natural resources affords an interesting question for policymakers and managers looking to initiate protective environmental measures. With one set of regulations already in place and a second set being explored, a comparison of the two presented a unique opportunity to discover what incited the decision to create regulations and how those variables can be recreated, if at all.

Smoke Management Plan.

The Nez Perce Smoke Management Plan has been thoroughly examined by previous academic literature. I have summarized these scholars and drawn what I believe to be the evidence of trigger points within the context of the Smoke Management Plan.

Clean Air Act: This section provides the regulatory background that lead to the creation of the Smoke Management Plan.

In 1963, the United States passed the Clean Air Act (“CAA”) (PL 88-206) in an attempt to improve air quality and prevent further damage to the nation’s air. The CAA’s general purpose was to serve as “...a set of principles designed to guide states in controlling sources of air pollution to multiple levels of pollution control requirements that the federal government prescribes by regulation and that the states apply and administer.” (Brownell, 2007). Amended several times over the years, the CAA eventually led to the creation of the Environmental Protection Agency (“EPA”) (PL 91-604) in 1970 through President Richard Nixon’s executive order. The EPA is now responsible for the administration and enforcement of the CAA at the United States federal level.

The CAA has demonstrated a relatively high level of success in implementation from region to region (Final Report on Benefits and Costs of Clean Air Act, 2011). The amended CAA is responsible for setting the National Ambient Air Quality Standards (“NAAQS”) for Ozone, Particulate Matter, Carbon Monoxide, Nitrogen Oxides, Sulfur Dioxides (more commonly known as acid rain), and Lead. Toward this purpose, the EPA establishes what it finds to be the scientific minimum for a set of NAAQS, which all states and tribes must meet at the basic level. States and tribes may choose to make the established regulations more stringent but they are prohibited from relaxing them.

State Implementation Plans: If a state would like responsibility for stricter regulations under the CAA, it must create and submit a State Implementation Plan (“SIP”) to the EPA for approval (42 USCA 7410(k)(3)). The SIP must include: enforceable emission limitations, air quality data, preconstruction review and notification requirements, permitting

requirements for new sources and existing nonattainment sources, air quality modeling, interstate air pollution, specifics for enforcement, monitoring and emission data, demonstration of adequate personnel, funding and program authority, as well as contingency plans, revision procedures, permit fee schedules and local consultation specifics (Brownell, 2007). If approved, the state will have primary responsibility to enforce compliance of NAAQS as a matter of federal law.

Tribal Implementation Plans: The EPA was the first federal agency to work with Indian Tribes in a government-to-government capacity, beginning with a commitment to full tribal regulatory roles and development within natural resource policy (Grijalva, 2006). A provision in the CAA grants power to tribal governments to administer and enforce the CAA on tribal lands, including Treatment as a State (“TAS”) status for purposes of carrying out CAA programs within reservation lands (42 USCA 7410(o)). To achieve this status, a tribe must prove to the EPA that it has a governing body with substantial governmental powers that is “reasonably capable” of performing the duties associated with the CAA, as well as a demonstration that all functions to be exercised by the Tribe must pertain to air resource management and protection within the boundaries of the reservation (Brownell, 2007).

The EPA must grant TAS status before any CAA authority and enforcement can pass to tribal governments. The TAS Final Rule allows control of activities of non-members on non-Indian fee lands if the regulated activities affect the “political integrity, economic security, or health or welfare of the tribe”, though the potential impacts must be “serious and substantial to allow tribes to regulate non-members” (Brownell, 2007). Once granted TAS status, a tribe is then responsible to research and create a Tribal Implementation Plan (“TIP”) under the same process and requirements as SIPs. As of 1999, tribes are allowed to

issue operating permits for major sources located on Indian reservations for sources of pollution as identified by the EPA (Brownell, 2007). The EPA summarized its relationship with states and tribes as “cooperative federalism”, stating that the “EPA and the states have been given joint responsibility by Congress for national environmental programs. EPA and the states must develop a workable partnership in which each performs different activities that are based on the partner’s unique strengths” (EPA Memorandum, 1983). In this way, the EPA, states, and tribes have a flexible and adaptive process through which they can collaborate on the transboundary nature of air quality throughout the United States. As of the time of this writing, the Nez Perce Tribe does not have TAS status.

Smoke Management Plan Narrative History: This section described the circumstances leading up to and the creation of the Smoke Management Plan by the Nez Perce and Coeur d’Alene Tribes in North and North Central Idaho.

Indian Tribes may be motivated by several considerations to create air quality programs; major sources, minor cumulative impacts, the protection of environmental and cultural resources, and increased negotiation power with neighboring entities (Milford, 2004). The mission of the Nez Perce Tribe Air Quality Office “is to develop a long-term air quality program strategy to improve and/or maintain air quality on the Nez Perce Reservation” (Nez Perce Air Quality homepage, 2014). Many of the Air Quality Office’s obligations focus on crop residue from opening burning because of the highly agricultural nature of the lands within reservation boundaries.

Open Burning is defined as “any outdoor burning that does not pass through a stack, duct, or chimney” (Idaho Department of Environmental Quality, 2014). This burning can be residential, agricultural, or prescribed. The Idaho Department of Environmental Quality

(“IDEQ”) regulates Open Burning within the state of Idaho in conjunction with other state, tribal, and local agencies. Local ordinances can prohibit burning, and IDEQ can issue burn bans based on weather and air quality concerns. IDEQ is also responsible for regulation of what is known as “crop residue burning” outside of Idaho’s five Indian reservations.

Crop residue is defined as “any vegetative material remaining in a field after harvest, or vegetative material produced on conservation reserve land” (IDEQ, 2014). This includes fields, pastures, broken hay bales still in fields, Conservation Reserve Program lands, food plots, and blanching or flaming operations. Crop residue does not include ditch banks, fence lines, orchard prunings, or forest slash piles (IDEQ, 2014).

The purpose of a smoke management plan is to

establish a basic framework of procedures and requirements when managers are considering resource benefits. These programs are typically developed by states and tribes with cooperation and participation by wildland owners and managers. The plan should mitigate the nuisance and public safety hazards posed by smoke intrusions into populated areas; to prevent significant deterioration of air quality, and NAAQS violations (Sandberg, Ottmar, & Peterson, 2008).

Smoke management plans are cooperative pollution control efforts among state, federal, and private entities to keep particulate matter below a set criteria level (IDEQ, 2004). Particulate matter is the most common measurement pollutant of concern in Idaho – including dust, smoke (residential, crop residue burning, and forest fires included), industrial and motor vehicle emissions (IDEQ, 2009).

Idaho is currently the only state in the Pacific Northwest that allows for statewide, open field burning, largely due to the prominence of Kentucky Bluegrass within the state's agricultural economy. The economic significance of the crop makes it and its growers a pivotal part of CAA regulations.

Kentucky Bluegrass is generally "swathed in early July then combine harvested sometime 2 to 3 weeks later to extract the seed. Stubble is removed and burned sometime between harvest and mid-fall to promote plant growth and stimulate the reproductive cycle" (Smathers, 2005 pg. 1). Field burning of Kentucky Bluegrass is also credited with preventing a series of diseases within the crop, including silvertop, leaf spot, stem rust, powdery mildew, and ergot (Holman & Thill, 2005). The effect of burning on insect and rodent populations has yet to be determined (Holman & Thill, 2005). Burning agricultural fields also "reduces the erosion of topsoil and controls dust by eliminating the need for tilling operations to clear residue and plant new seed" (Whitman, 2001, pg 1).

Agricultural benefits aside, the widespread practice of field burning had some drawbacks. The towers of smoke released particulate matter into the air, impacting breathability for the people who lived in the areas adjacent to Kentucky Bluegrass fields. This particulate matter can travel large distances via airstream currents, thus potentially impacting areas much larger than those within a visible range of the fields. Adding to the complexity of regulating air quality was that the EPA's role in regulating agricultural burning was limited to ongoing burns, not isolated individual burns, regardless of their intensity.

Marsha Mason, a resident of Rathdrum, Idaho, suffocated from an asthma attack seemingly exacerbated by the field burning of the surrounding area in 2000. At the time of

her death, the nearest air quality meter “recorded the second-highest fine-particulate count, or PM2.5 reading, of the entire 45-day burn season – 161 micrograms per cubic meter. For a brief time the Rathdrum Prairie had worse air pollution than most major American cities have during the year” (Whitman, 2001, pg. 3-4). As reported by *U.S. News & World Report* in 2001, her death served as a catalyst for a regulatory change in field burning; the IDEQ subsequently created a burn ban when particulate matter reaches 100 micrograms per cubic meter to “take account of short-lived air pollution spikes” (Whitman, 2001, pg 4.) Even so, these spikes can “cause serious respiratory distress – particularly to asthmatics, children, the elderly, and those with pulmonary impairments” (Saral 2005 pg. 626).

In 2002, the organization Safe Air For Everyone (SAFE) filed an action against several Kentucky Bluegrass farmers for RCRA violations from the burning of their grass residue (*Safe Air for Everyone v. Meyer*, CV-02-241-N-EJL (Idaho, 2002). This was dismissed by the district court for lack of jurisdiction. On appeal, the Ninth Circuit found that the residue did not fall under the EPA designation of “discarded material” and therefore burning it could not be regulated as “solid waste” disposal (Saral, 2005.) This designation as a “recycled material” thereby precluded it from so-called citizen suits under RCRA provisions (*Safe Air for Everyone v. Meyer*, 373 F.3d 1035 (9th Cir. 2004).) These holdings had the secondary effect of chilling litigation through a lack of venue within which citizens could pursue injunctive relief (Saral, 2005).

In 2004, the University of Idaho Social Science Research Unit (SSRU) conducted a study regarding Kentucky Bluegrass open field burning in the state of Idaho. Two thousand and ten people were surveyed regarding their perception of general air quality, agricultural burning, levels of impediment to daily activities, and opinions on current regulations. The

study concluded that a “large majority of residents in the ten-county region perceive either good or very good air quality...[and] a larger percentage of respondents would elect to maintain the current smoke management plan and regulations than to change it” (Wulfhorst et al., 2006, pg. 28). The study concluded that results “could serve as an indicator that the Idaho state management plan, co-directed by ISDA and Nez Perce and Coeur d’Alene Indian Tribes in the [Kentucky Bluegrass] growing region, has had some positive impact on the mitigation of air quality concerns from field burning” (Wulfhorst et al., 2006, pg. 28).

The management plan referred to in the University of Idaho SSRU study was implemented in a voluntary capacity in 2002 by the Nez Perce Tribe. The crop most impacted by implementation plan was Kentucky Bluegrass. This management plan utilized field registration, burn permit applications and authorization through the Nez Perce Tribe, Coeur d’Alene Tribe, and the IDEQ with ISDA authority to issue penalties for violations (Wulfhorst et al., 2006.) Compliance has largely been achieved through collaboration, with program framework designed to provide flexibility to the regulated community through input, ownership, and responsibility. The plan itself relies in part on a system of applications and permits coordinated by the Nez Perce Air Quality Program, with some degree of oversight from the Nez Perce Tribal Executive Council. Collaborative meetings with the EPA, neighboring states, and tribes in the region further support the program’s policies.ⁱⁱ This Nez Perce Smoke Management Plan received the Regulatory/Policy Innovation Award in 2008 from the EPA for Clean Air Excellence.

The smoke management plan was voluntary in the beginning. This “allowed the agricultural community to prepare for FARR implementation. The agricultural community, which initially resisted the new FARR rules, now fully supports the program.”ⁱⁱⁱ Technical

guidance and burn prescriptions are “living documents to be revisited when warranted to implement changes when necessary.”^{iv}

The Nez Perce Smoke Management Plan inspired further air quality actions within the state of Idaho. On January 30, 2007, the U.S. Ninth Circuit Court of Appeals ruled that a 2005 EPA decision to allow crop residue burning in Idaho was legally flawed (*Safe Air for Everyone v. EPA*, 475 f.3d 1096, amended 488 f.3d 1088 (9th Cir. 2007).) Due to the ruling, all field burning was banned until Idaho could develop a new SIP that provided more regulation of open field burning practices in accordance with the 1990 CAA and subsequent EPA regulation on air quality. Citing tribal sovereignty and their existing smoke management plans, both the Nez Perce and Coeur d’Alene tribes started burning Kentucky Bluegrass fields within their tribal lands on August 13, 2007 and August 27, 2007 respectively. In 2008, the Idaho Legislature mandated the IDEQ to manage all crop residue burning, who subsequently required all farmers to receive permits for burning, to pay a \$2 fee per acre to burn, to complete burn management training within five years, and to follow all rules concerning no-burn days. In September 2009, Idaho released its SIP revisions modeled extensively on the existing Nez Perce Smoke Management Plan, which were later approved by the EPA. This made the Idaho SIP, just like the Nez Perce TIP, federal law. Much of the research regarding CAA enforcement suggests, “increased federal support is vital for achieving outcomes because most tribes have insufficient resources to develop comprehensive air programs on their own” (Milford, 2004, p.215).

The main technical distinction between what the Nez Perce and Coeur d’Alene Tribes created and what the State of Idaho created was that they operated independently from each other. While the Tribes, when drafting their own Smoke Management Plan may

have contacted and collaborated with those potentially impacted by the plan, they did not appear to work with other governments to design it. Similarly, the State of Idaho created its plan through its own authority.

Interdisciplinarity

As an interdisciplinary program, the Water Resources department asks its students to seek propositions outside of the realm of one traditional research track. The process of answering a question that is too broad for a single discipline can still draw from disciplinary perspectives to produce a more comprehensive understanding (Repko, 2008). Water conflicts are intrinsically a confluence of disciplines requiring multiple approaches for accurate evaluation. Assuming that all members of a watershed, including policymakers, decide to regulate a natural resource, I explored the conditions necessary to convince them to exercise that authority. The social research done in the realm of natural resources provides insights for managers looking to improve or change existing regulations for shared resources.

Legal and administrative analysis of tribal, state, and federal government agencies, combined with social attitudinal research of interviewing policymakers manifested unique conclusions at the end of the data collection. Interdisciplinary research can be justified by meeting one of more of the following criteria: complexity, important insights into the problem have been produced by at least two disciplines, no single discipline has been able to comprehensively explain or resolve the problem, the research question is at the interface of disciplines, and the problem is an unresolved societal need or question (Repko, 2008, pg. 157).

By necessity, the legal realm favors practicality over theory. It is a slow-moving area, relying more on precedent and less on innovation. For this project, I had to combine multiple

areas of the law: natural resources, water, land use, Indian, Constitutional, and administrative. These were combined with the practice of alternate dispute resolution via my personal familiarity with mediation and negotiation techniques.

The application of the law to a practical question is not alone sufficient to reach the nexus of interdisciplinarity. To fully understand what was occurring within the Lapwai Basin, I needed to achieve competence in my scientific understanding of the status of the watershed's health. This knowledge was crucial to being able to speak with watershed managers and government employees about the restoration attempt going on within the Basin. This included taking classes in watershed ecology as well as reading articles about the ecosystems within the Lapwai Basin and its surrounding area.

Finally, I combined qualitative research methods with the framework of collaborative governance in creating the research interview instrument. By using legal conclusions and frameworks drawn from scientific information and historical events, I was able to confront the question of whether or not collaboration was occurring within the Lapwai Watershed and explore where it had been successful.

This project considers jurisdictional and boundary complexities stemming from the existence of checkerboard patterns of land ownership, as well as multiple governing bodies attempting to work in tandem despite differing opinions and political stances about the source of the problem and of potential solutions. There has been research done on similar situations in legal, sociological, and scientific disciplines, ranging from critique to data collection. The crossover of a qualitative data collection with a legal system designed to regulate a scientific problem creates a substantial nexus of interdisciplinarity. Trigger points have not been conclusively applied to protective natural resource regulations as part of an

interdisciplinary project. The interconnection of water resources and collaborative governance provided a unique perspective on a complex and continuing jurisdictional conflict within the Lapwai Basin.

What this project contributes to the dialogue about collaboration within the Lapwai Watershed is the evaluation of the legal frameworks through a social science lens. The force of law creates the “thou shalt nots” within our society, but what this project focuses on instead is the encouragement of collaboration for natural resource action within an area. To do so necessitates the application of qualitative social science approaches, such as the snowball sampling method, to identify patterns in people’s beliefs and actions. The review of literature, the interviews of government employees within the case study area integrates several facets of each area into a more comprehensive conclusion about the state of collaboration within the Lapwai watershed.

CHAPTER 4

Results and Analysis

This section presents my assumptions going into the project, the case study of the Lapwai Watershed, beginning with background on the Basin itself, followed by my two research propositions and an overview of the themes present in the interviews.

Assumptions.

In order to pursue my research, I had to assume certain aspects of the area I was exploring. There were three altogether:

- (a) Water quality in the Lapwai Basin is impaired;
- (b) Improved water quality in the Lapwai Basin is desirable; and
- (c) The Nez Perce Tribe is a sovereign government with the authority to interact and enact regulations within its boundaries.

These assumptions played an important role in both the creation and the results of the research project. From a creation standpoint, my project was based on previous research projects from the University of Idaho Lapwai student and faculty research team, all of which focused on different features of the Basin. The interviews demonstrated the incompleteness of some of my assumptions, as will be explored in the Discussion section.

Lapwai Basin.

The Lapwai Watershed is currently under checkerboard jurisdiction, making unified land and natural resource policy difficult. Checkerboard jurisdiction, a problem unique to Tribal entities, exists where private parties own sections of reservation-designated land.

History: Lands historically set apart for the use of Indian Tribes entered the commercial market in the late 1880's in what is known as the "assimilation and allotment period" (Colby, Thorson, & Britton, 2005, pg.4). The goal of the assimilation and allotment period was to encourage Indians to become independent farmers and to assimilate them into existing non-Tribal economic circumstances. The result was the parceling-up of reservation land, distribution to Tribal members, many of whom ended up selling the parcels to non-Tribal homesteaders. Once the land was in private control, it could be bought and sold according to non-Tribal laws. From the enactment of the Allotment Act of 1887 to 1934, "Indian landholdings were reduced by 65 percent, from 138 million acres to 48 million acres" (Colby, Thorson, & Britton, 2005, pg. 5). In the 1970s, federal legislation was passed that returned reservation lands to trust lands, except for those pockets of property held by private, non-Indian parties. Unless the local tribe purchases the land back into the trust lands, it remains outside of federal trust responsibility.

Authority: Because of the checkerboard jurisdiction within the reservation, the government entities with authority to change land use practices are the Nez Perce Tribe and federal government on reservation land, with the state of Idaho and the Nez Perce County governments subject to federal laws on fee land, although other parties may claim interest in various outcomes and might appreciate inclusion in the decision-making process. As a result, the Clean Water Act provides the foundation for water quality regulations and standards within the federal, tribal, and state controlled watersheds.

Research Propositions.

My research was guided by two propositions: (1) An event or perceived event, a "trigger point", will encourage collaborative governance for protective natural resource

regulations; conversely, a lack of perceived or real trigger point will hinder collaboration on protective natural resource regulation. (2) Federal aid or enforcement is a necessary component of natural resource management and collaboration between varying levels of government.

The first proposition concerned the seeking out and identification of an event or the perception of an event that encouraged or necessitated a shift into protective natural resource regulation. All participants discussed the emotional connections that people feel for the watershed, and how those connections impact policy and decision-making. Four participants cited the implementation of the Snake River Basin Adjudication as a major event in shifting focus to water rights and restoration, as well as the listing of waters within Nez Perce Tribal boundaries as impaired on Idaho state lists. Participant 7 referenced a highway project to put a bridge in over a riparian area without a permit. All ten participants mentioned climate change as a current complication and future concern for both restoration and water use as a whole.

As previously discussed, much of the action taken to improve the quality of the airshed in north central and north Idaho was tied to observable particulate matter in the air, as well as decreased quality of life during burn seasons and the eventual death of a local woman from a respiratory affliction aggravated by the burn plumes. The push for protective measures in the Lapwai watershed was less dramatic; the interviews failed to indicate one specific incident or event that motivated protective measures in the watershed. Three participants referenced the early 1990's, specifically 1993 and 1994, as years when legal activity over water resources increased. This was tied to a court case, as mentioned by Participant 9, where the "EPA was sued by an environmental group because Idaho not only

didn't have a 303(d) list but also hadn't done any TMDLs [as] mandated by the CWA." Two participants mentioned a recent algae bloom in the watershed. Five participants discussed contamination from farm runoff and nonpoint source pollution as major, ongoing concerns in the watershed. All ten participants discussed overall water quality, although the level of quality and the actual intended uses of the water varied in each interview.

The second proposition evaluated the necessity of federal support for the Nez Perce Tribal Government actions within their reservation boundaries. Participants who felt their agencies had federal support overwhelmingly cited the importance of funding for government actions. Participant 4 mentioned technical support from the federal government. Participant 5 brought up the importance of tourist money to the area and the role that water quality plays in drawing visitors.

Overview of Themes.

Five themes materialized from the participants' interviews with a high frequency of repetition. These five themes are:

- (a) Emotional and physical connections to water (100% of transcripts),
- (b) Concern for the quality and use of water (100% of transcripts),
- (c) The importance of funding (80% of transcripts),
- (d) Restoration efforts are well-intentioned but inconsistent (70% of transcripts), and
- (e) Difficulty meeting needs of all involved parties (60% of transcripts).

I categorized these emergent themes under their appropriate propositions in the discussion.

CHAPTER 5

Discussion

“I see north central Idaho as a jewel of the United States and the Northwest; not just spawning grounds, but the historical and cultural significance of the area is pretty great.”

-Participant 5-

This section synthesizes the results from the interviews with the existing literature on collaborative governance and draws conclusions about the application of the framework to the Lapwai Basin. I approached this research with the assumption that the Lapwai Watershed had impaired water quality, and that the government employees who worked in the watershed would desire improved water quality within their basin. The discussion is structured in three subsections; an evaluation of the collaboration in the Lapwai Basin, an evaluation of the trigger point, and an exploration of the role of funding in governance.

1. Multijurisdictional collaboration is not currently occurring among government agencies within Lapwai Watershed.

Based on the existing literature and the people that I interviewed, I assumed for this project that collaborative governance is the best option for the government players involved in the Lapwai Basin. Collaboration between governments is necessitated by the shared nature of the water resource. According to Fish et al. (2010), collaborative governance is a continuous, four-step process set within the contextual conditions of the area. The four steps are problem setting, direction setting, structuring, and output/outcomes. Each step relies on continuous evaluation and flexibility for new challenges as they arise (Appendix C).

One of the major themes that presented during the interviews was the difficulty in trying to make all involved parties happy. From the interview with Participant 5: “Some of the landowners might work with the Tribe, but I don’t think they see eye-to-eye on

restoration goals or techniques.” This concern is largely why I believe collaborative governance would be of benefit to the government entities seeking to engage in protective natural resource measures. There is some collaborative activity within the Basin, but it is insufficiently broad to create comprehensive changes in natural resource regulation.

Evidence of Collaboration between Governments: The Smoke Management Plan was developed by information and resource sharing between the Nez Perce and Coeur d’Alene Tribes, each acting as a separate authority but working toward a common goal. There is evidence of collaboration in the Lapwai Watershed already, including more efficient irrigation practices by area users and reduced withdrawals through the Lewiston Orchard Project from Lake Waha on the reservation. Participant 4 mentioned another reservoir in a similar capacity, saying that “Mann Lake at one time was a significant problem [for water quality in the Lapwai Basin], and I think they’re coming to a solution between the [Lewiston Orchard] Irrigation District and the Tribe.”

Other examples of collaboration between area stakeholders include the Lower Clearwater Exchange Project appraisal process via the Bureau of Reclamation’s Rural Water Supply Program and LOID’s efforts to promote conservation among its City of Lewiston water users via an awareness campaign of xeriscaping and public outreach. 70% of the interview transcripts indicated that the restoration efforts by the Nez Perce Tribe are well intentioned but inconsistent in both application and incremental results. “I think that the restoration attempts are and will continue to be successful. I see it as a move in the right direction,” said Participant 2; “The Tribe has always been very active, they have a very active implementation program. They persevere when they have setbacks, and they have quite a few,” said Participant 9.

Evidence of Lack of Collaboration between Governments: One of the fundamentals within collaborative governance is reciprocity of social norms and values. The stakeholders involved in the process must be willing to utilize social learning toward creative problem solving. As with most public policy issues, there can be dissent about what constitutes the best-case scenario, sometimes called a best alternative to a negotiated agreement or BATNA, between parties. “They’re always wanting to maximize their resources the best they can to bring in additional resources, so they have one side of the house that is promoting logging up there and wanting to log hard and heavy to get the resource and you have another faction and department within the Nez Perce Tribe that’s hammering at them that they’re messing up the water quality by doing so,” said Participant 1.

Such dissent often exists among two or more individuals within a single organization, agreed Participant 5: “You especially have - and that includes within agencies, within the Tribe, or other state agencies – the restoration attempts that are founded primarily in good science but don’t always bring the social side along.” Sometimes relationship building requires mediation techniques to bring people into common ground, especially where there has been historical discord. “There’s a long history of the Tribe and friction between them and the state and some of the local people. I kind of can’t help but think that maybe there’s a little bit of a prejudice problem,” said Participant 9. As was discussed in the literature, tribes often face entrenched negative attitudes from non-Tribal entities. Sovereignty has been and continues to be of primary concern to tribes seeking to assert jurisdiction.

Three participants cited causes that were outside of current human control, specifically the extent of the changes to the riparian system from earlier FEMA channeling of the creek and climate change. Participant 4: “I think they’re sporadic at best. The

channelization of the system itself often counters any positive headways made in the lower system.” Similarly, there is recognition within the Tribal agencies that fish rehabilitation cannot occur completely within Tribal lands, or even solely within the state of Idaho. During the SRBA mediation, the “mantra was: change what you can now and that will increase the pressure on the other variables that may be necessary to change in the future. Secondly, save what you can now.” (McGovern, 2006, pg. 561).

Participant 1 mentioned the problem that sometimes, effective water management can be detrimental to keeping people’s awareness of continuing problems. “I think we’ve resolved most [...] concerns, so when you don’t have the problem [any] more, people take for granted what you’re doing and they don’t necessarily care. You kind of make them apathetic by doing a good job.” The solution to this could be the greater involvement of the public at the planning and implementation stages. There may not be the resources available to the agencies to do so, as will be further expanded on in the funding section of this discussion.

Interaction Between State, Federal, and Tribal Regulations: The stated purpose of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters; to attain a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water, and to eliminate the discharge of pollutants into the nation’s navigable waters” (33 USC 1251). The EPA and CWA pull federal jurisdiction for these goals through regulation of point source and nonpoint source pollution in partnership with state agencies.

For state agencies, the EPA requires a technology-based standard to limit rate, concentration, and amount of pollutants discharged. States are permitted to seek

administrative authority over navigable waters within their boundaries. Seeking federal-state partnerships, the EPA administration is authorized to suspend its federal program under the CWA when it approves a state's program (Porter, 2007). State governors who would like to administer their own programs under the CWA can submit a description of their proposed programs with authority as established by state law. Following EPA review and approval, the state acquires NPDES permitting authority with associated inspection and enforcement responsibilities (Porter, 2007). Once done, the states may either choose to adopt its own standards or to follow the federal program standards and authority, though the EPA retains oversight authority in both cases.

There were several reasons for my assumption that the Lapwai Basin had impaired water quality. First, it was listed as such on the IDEQ as an impaired watershed as critical habitat. Second, previous research coming out of the University of Idaho not only assumed it was impaired, but in several cases, unequivocally stated as much. Third, there is evidence of channelization for floodplain prevention, infrastructure for seasonal water storage, and agricultural diversions from the Lapwai Watershed to the neighboring city of Lewiston. Finally, the Nez Perce Tribe and the Nez Perce Soil and Water Conservation District created a Basin Ecological Restoration Strategy outlining future directions for improvement to the Basin. If there were no problems with the water quality, why would all these indicators exist?

The goal of the Nez Perce Tribe in their water quality restoration strategy is to improve the overall health of the freshwater riparian ecosystem. Part of the end result is to increase salmonid populations in the area. Degradation in the area stems from loss of riparian vegetation, damage to soils, pollutants from existing dryland agricultural and

roadside run-off, increases in water temperature, and historical removal of stream meanders for flood and irrigation control. Despite coordinated efforts to mitigate through Best Management Practices (“BMPs”), no-till farming practices, and point source pollution control, the watershed still remains insufficiently habitable for salmon and steelhead populations.

Proposed state and tribal standards must be consistent with CWA standards and jurisdiction. “Tribes have a responsibility to protect the health and welfare of their communities through their own Water Quality Control Plans. Despite its shortcomings, the CWA provides a framework that allows tribes to create standards for their uses and to protect against those uses being undermined by non-tribal communities with whom they share their waters” (Porter, 2007, pg.536). A significant amount of that framework actualizes in the form of financial aid set aside for states and tribes recognized and found in compliance with natural resource policy. The EPA Administrator is authorized to make grants annually to any State or federally recognized Indian Tribe (33 USC 1281). Without this federal aid and authority, some tribal governments might not be able to pursue environmental improvement projects and activities. As one environmental group concluded, “without a meaningful federal mandate, the states, with a few . . . exceptions, have not implemented polluted runoff programs on their own” (Zaring, 1996, pg. 528).

Similarly, Idaho does not have its own standards for nonpoint source pollution and is subject to EPA control over its water quality designations. As of this writing, the EPA handles both the setting and implementation of water quality standards for both the state and Tribal water resources.

In his article summarizing the CAA and RCRA definitions of tribal jurisdiction under the CWA, Keith Porter (2007) identifies weaknesses within EPA decisions and language that hinders full tribal sovereignty and calls for greater federal control over environmental policies to effectively manage watersheds. He concludes,

[T]he history of environmental regulation demonstrates that state regulation has been uneven and unreliable, a situation that is not likely to improve as environmental issues become more difficult, and hence more controversial and expensive, to resolve. Second, many remaining environmental problems, such as nonpoint source pollution and coastal pollution, are difficult in part precisely because they require coordination at a multi-state, watershed, or regional level; individual state regulation is simply insufficient (p.536).

Willing collaboration between policymakers, stakeholders, and enforcement agencies appears to be the most significant indicator of success with the creation of natural resource regulations, but federal authority and the related funding often attached seems to be a major player in regulatory success.

Further hurdles to § 303 compliance include authority complications stemming from historical checkerboard jurisdiction, a limited amount of water for a large group of stakeholders, and differing stances on the goals and uses for the watershed. Some positions are ideological while others are political, and finding common ground between all parties reliant on the Basin has demonstrated a difficult task.

Jurisdictional Concerns: When the state of Idaho included the Lapwai watershed on its §303(d) impaired waters list, it increased tension between the state and the Nez Perce Tribe regarding the jurisdiction over the resource. Participant 9 addressed this: “One of the

big issues today is the Tribe really doesn't want their waters listed on the state 303(d) list. They don't want the state having jurisdiction over the waters within their reservation boundaries. The attitude seems to be that 'we don't really want to mess with that, we just want to clean up our water. It's impaired, let's clean it up. The state doesn't really need to have their beak in this.'" Another agreed: "[The Nez Perce Tribe] want[s] to protect those treaty resources." Both legal actions turned attention to the claims existing within the basin.

Participant 5 concurred: "We have varying regulation and we have different authorities, so where you have a Tribe that does not have TAS then you also have a regulatory agency, a state agency that regulates some of the water quality within Tribal boundaries...it's unique because of how many entities are involved in the Lapwai watershed."

With the EPA in charge of setting standards for both the state of Idaho and the Tribes, the Nez Perce Tribe would likely prefer to have control over its own natural resource regulation. The TAS status is an avenue for the Tribe to pursue such control, but there are reasons for its hesitance to seek such a designation.

Tribes have an especially heightened recognition of the influence of legal decisions on their sovereignty. As Participant 10 said during his interview, "[the Nez Perce Tribe] themselves are somewhat afraid to go after [Treatment as State status] because of setting precedents, you know, either a bad result in court, because it most likely would go to court, for themselves and for other tribes." Participant 9 echoed this sentiment; "There was a lawsuit in South Dakota with the Yankton Sioux Tribe over a landfill location, a new landfill was sited and I think the Tribe actually won the issue over the landfill but in the course of

that, their reservation was diminished. They cut a whole bunch of the land off of the official reservation. And nobody wants to see that happen with the Nez Perce.”

The lawsuit referenced is *South Dakota v. Yankton Sioux Tribe*, 118 S. Ct. 789 (1998), wherein the Yankton Sioux pursued legal action to regain regulatory environmental control over a landfill and ended up bolstering an existing legal precedent that prevents Tribes from asserting authority over non-Tribally owned lands. The Supreme Court reached their holding based on existing law (*Montana v. U.S.*, 450 US 544 (1981)) colloquially known as the Montana Test, under which “tribes are generally divested of regulatory authority over fee lands, at least in areas that are broadly opened to non-Indian use, unless they can demonstrate that the non-member use of the fee lands will impact core tribal governmental functions (Royster, 1998, pg. 290).

The application of the Montana Rule is evident in the checkerboard fee and non-fee lands within the Nez Perce reservation. “It’s a difficult situation because the Tribe actually owns, I think, 10% of the land within the outer boundaries of the reservation. This makes a complicated issue because there are non-Tribal members farming the land that was homesteaded generations ago, they’ve been there for generations, and they view the land as theirs. Everybody seems to be really worried about jurisdictional issues, including the state of Idaho. I’m not sure I totally understand that.” The emotional and legal bonds that non-Tribal landowners have to reservation lands may be sincere, but when combined with the Tribal government’s restricted ability to implement comprehensive natural resource planning, the non-fee lands act as a barrier to Tribal comprehensive planners.

The Role of the SRBA: The Snake River Basin Adjudication was created in 1987 by the Idaho Department of Water Resources to inventory all ground and surface water rights

connected to the Snake River and its tributaries. The process began in 1982 when the Idaho Supreme Court decided *Idaho Power Company v. Idaho*, turning “the state of Idaho from a partially appropriated to an over-appropriated water system on the Snake River” (Shaw, 1988). Over 150,000 individual claims had to be identified and prioritized under the new system, and a new court was established to handle the task. (IDWR). As Participant 4 said, “I would think it became the biggest priority when... maybe the early nineties when the Snake River Basin Adjudication began to take off. Late eighties, early nineties and developed as other issues were settled and resolved.” Another participant’s recollection: “When they started talking about the Snake River Basin and that was back in what, ’90? The whole adjudication process, and now they’re moving up there, and the Tribes obviously feel very strong about the overuse of waters, and some of the diversions that have happened, you know, waters that would have come down to Lapwai through Sweetwater.” Participant 10 mentioned that the Snake River Basin Adjudication put northern Idaho on alert for the impending North Idaho Adjudication: “It’s a list, the Idaho Department of Water Resources had a schedule of where they were going, which basins, which regions.” At that time, users and government entities alike investigated and evaluated how much water was in the creek, how much was being taken out, and what options were available future changes to the systems. The Nez Perce Tribe’s water rights claim was filed in 1993; the Nez Perce Tribal Executive Council agreed to the settlement in 2005 (Haller, 2005). By 2006, the Tribe had concluded its involvement with the Snake River Basin Adjudication process.

While the adjudication was still in its early years and high in the tributaries of the Snake River, the state of Idaho was facing pressure to address its lack of compliance with CWA requirements to list impacted waters within its borders as “impaired” for 303(d) purposes. In 1994, the Idaho Sportsmen’s Coalition, Idaho Conservation Coalition, and the

Sierra Club Legal Defense Fund filed a suit against the EPA to create such a list. From the interviews: “When Idaho did, under court order, produce a 303(d) list, it was very short, it was only a few waters. After a couple of trips to court, the judge said ‘They’re obviously not going to do this, so EPA, make a 303(d) list for Idaho,’ and they did. This was back in the day when they based it on data and also something called ‘best professional judgment’ - if you had personal knowledge of the water and felt it was impaired you could actually put it on the list. In today’s world, when we’re working on TMDLs and doing them in watersheds, there’s always a lot of waters listed, not always but most of the time, that the state wants to delist.” Idaho has a casual tradition of resisting federal involvement in state affairs, so the opposition to federal listing of impaired waters came as no surprise to those familiar with Idaho politics.

Participant 10 speculated as to why the Nez Perce Tribe hasn’t gone to court to delist some of their waters from the state 303(d) list: “We see it as their jurisdiction, they see it as their jurisdiction, but when it comes down to the courts – right now, their ducks aren’t in a row to go to court on the issue. No one feels strongly enough that we for sure have a completely cold-cut case. It might not seem that big, but it’s a jurisdictional thing. It pushes. It’s one little baby step for the Tribes to say ‘EPA again is backing us, the state does not have authority, so therefore their programs should not include our waters,’ even to the point of saying, you know, having a TMDL list of impaired waters or a 303(d).” Participant 9 concurred, “They said they’re coming up with a plan to deal with the tribal waters on the list but we don’t know what that means. The state Attorney General has this jurisdictional issue with the Tribes that he won’t let go of, so we don’t know where it’s going.” Under the current political climate, it seems unlikely that the state of Idaho will be willing to relinquish control over the Lapwai waters listed on its 303(d) impaired list. Participant 9 concluded this

sentiment with, “It’s been an evolving, constantly changing thing and in this process, waters on the Nez Perce reservation got listed on the state’s 303(d) list. Probably wrongly so, but it happened.”

Collaboration in the Future: The different governments involved in the Lapwai Basin restoration effort have different opinions about what constitutes the best use of the resource under the Prior Appropriation doctrine and the CWA. A balance must be struck between stakeholders and interested agencies before true collaboration can begin, as voiced by Participant 2: “Hopefully the issues that come out in the future are really about water and the true needs of the fish and the people who live in the system are taken into account and the other needs or desires don’t push water consumption out of the way. Farming is very important. Use of water is a top priority; we all need to eat. I have a little bit of an issue with ‘fish come first’ – I think fish need to be in the balance, you hate to see a species become extinct where it’s lost forever. But we want to feel like we’re working with groups of people that believe, that truly believe that there has to be a balance. It’s important to take everybody’s needs into account.” Finding common ground between interested groups is crucial to the problem and direction setting stages of collaborative governance.

The interview results did not agree with my assumption that the watershed had impaired quality. What I found was that some government employees do not perceive the watershed as in crisis. This basic assumption I had going into the project – that stakeholders would agree that the water quality was impaired and that they would desire to improve it – was not correct. This could be one reason why collaboration is not occurring on a more comprehensive level within the Watershed.

In practice, any cooperative or democratic decision made regarding a natural resource will suppress at least one stakeholder's opinion of what constitutes the ideal use for it. However, by increasing organizational and governmental focus on collaboration and leadership, collaborative governance has the potential to expose yet undiscovered solutions to a complex problem. Unfortunately, the Lapwai Basin Restoration Plan is not yet able to engage the framework of collaborative governance because there has not yet been a trigger point to bring all interested parties into the process.

2. Multijurisdictional collaborative governance has not occurred because there has not been a trigger point within the Lapwai Basin Restoration Project.

As was previously discussed in the literature review, I have opted to change the collaborative governance vernacular from 'crisis points' to 'trigger points', as the word crisis has an inherently negative connotation. Through this project, I found that motivators for action could include events as monumental as the creation of a dam or as inoffensive as a court case.

Comparison of Trigger Points: Where the Smoke Management Plan and Watershed restoration plans diverge is at their respective trigger points. The Smoke Management Plan trigger point had a human connection, accessibility for the average member of the population to relate to and understand. People could see, smell, and sometimes taste the difference in the air quality during burn season, even if they weren't directly adjacent to the agricultural operation. They could see it physically impacting those with weaker constitutions. Some of them knew the woman who passed away from breathing complications connected to the field burning. These are all factors that a layperson can relate

to and understand. The trigger points for the Lapwai Watershed, however, are far more nuanced and removed from the non-Tribal populous.

Court cases involving federal lists of impaired waters paid for by Sierra Club monies may not be high on the list awareness for the people near the Lapwai Basin who are concerned with their families, their jobs, and their daily lives. The legal system is perceived as an overly complex and expensive institution – one that most choose to refrain from dealing with unless they absolutely must. While the government managers and employees that I interviewed had an awareness of the role these legal procedures played in creating change, the general population would not have this same familiarity or even recognition of the interplay that has occurred.

Participant 5 disagreed by saying that “Water resources is on that personal, emotional level when people get involved, to be motivated to adopt regulations, or push regulations, sometimes water is easier for people to relate to, rather than air that you can’t see. Even though we all live in the same airshed and we should be just as concerned about the quality of the air, it seems like more people can identify with a water source. They related to it on a different level.”

As Participant 5 said, “I have some personal perceptions and I’ve just observed it from a workplace, professional level – I think they’re good attempts and a lot of peoples’ hearts are in the right place. But as far as the current restorations, my perceptions are that not all the entities that are doing the restoration are on the same page.”

Water Use as a Motivator: General mindsets and frameworks have been in place for government agencies to use to pursue their projects. According to Participant 4, “It’s not just the, I guess you could say aesthetic value of having clean water – a whole segment of people

who come and interact with my agency are concerned about the human consumptive uses that are culturally based. I have individuals who tell me they could drink from those waters without having filters, that they were clean enough to drink from, and they still wash, they still swim in those waters as part of cultural practices. I have to ensure that I'm consistent with the human uses and they're different than agriculture or grazing." Participant 10 drew a connection with a previous project with another Tribe within the state of Idaho: "It goes beyond what you'd normally think of when you think of water quality standards, most water quality standards. Mostly you're thinking about topical. It goes beyond that, like working on the Shoshone-Bannock's standards, one of the things is sweat lodges. You're using water and you're pouring it over rocks and it isn't just ingesting it, it's breathing it. Another way of entering the body – something standards hasn't really wrapped their brain around when they're going through standards design and development."

Restoration and preservation have been priorities for most of these agencies for decades prior to the enactment of the current Lapwai Creek restoration; the grants and programs encouraging natural resource conservation ebb and flow with the priorities of federal government and economic stress. Participant 7 said that the Lapwai watershed conditions have "...been bad for decades. I think we're working on incremental improvements, you know, planting riparian vegetation, trying to recreate that personal habitat. There's a lot of agriculture going on, a lot of channel modification, a lot of channels that have been straightened out next to roads. That affects the interaction between streams in the floodplains, how they deposit sediments, washing out – it's pretty beat up."

The Lapwai Creek restoration is structured differently than the Smoke Management Plan and involves a broader group of agencies and stakeholders. While it has a similarly

narrow goal, the means to address the desired end in the Lapwai Basin are much more complicated and on a longer timeline for tangible and effective improvements. The stated goal for the Restoration Plan is to “restore aquatic habitat for resident and anadromous fish species, promoting quality habitat within a self-sustaining watershed” (Lapwai Creek Watershed Ecological Restoration Strategy, 2009). This goal is important to select groups of stakeholders; to the Tribe, the fish populations have great cultural and historical meaning. To recreational users, the fish provide activity and a reason to spend time in Idaho’s beautiful natural environment. Some towns and businesses rely on tourist spending for economic benefit and survival. Those people who are unaware of or indifferent to the Lapwai Basin restoration plan, a trigger point is needed to create an impetus for support of this or a similar plan to improve water quality within the watershed.

What changed in recent years to encourage a shift towards awareness of water rights, the potential to lose some or all of current water rights, and an overall desire to conserve water resources for current and future users. “It’s in their reservation boundaries, it runs by their towns where many of their people live, it has historically had salmon and steelhead runs up them,” said Participant 3. The events themselves vary from people to people and place to place. For the Lapwai Basin watershed, a contender for a trigger point was the confluence of two major legal events: creation and pursuit of the Snake River Basin Adjudication in 1987, and the *Idaho Sportsmen’s Coalition v. Browner* case decided in September 1996, which required the state of Idaho to develop a comprehensive 303(d) list of impaired waters. However, this nexus proved insufficient to motivate multijurisdictional collaboration.

My interviews did not delve into the racial or sovereignty concerns at play in the Lapwai Basin. I assumed that the Tribe is a separate sovereign fully capable of regulating itself and its people. I am left with the unanswered question of whether the lack of shared perception of a problem with water quality had to do with different cultural values, or with apprehension of a potential shift in power dynamics within the Basin. Both of these questions could be pursued by later research.

If there has not been a trigger point yet within the Lapwai Basin, I had to ask myself if there could ever be one significant enough to create a desire for social learning and collaborative problem solving. Previous research states that external threats are sometimes enough to motivate collaboration between previously non-cooperative groups. My only prediction for a potential trigger point would be such an outside threat. Beyond that, I cannot foresee an event great enough to push the groups within the Lapwai Watershed out of their current state and into a collaborative mindset.

The Role of Shared Values in Collaboration: One of the ways leaders can potentially increase the success of future restoration plans would be to share their own connections to the watershed with the populations surrounding it. The Tribal population has a strong historical connection to the streams within the Lapwai Watershed, as Participant 4 said, “There’s a ceremonial and spiritual connection to some of these waters, and our oral histories very much identifies what those cultural uses are, so we have to take those into account.” Most government leaders seem aware of this relationship, but can it be communicated to stakeholders in such a way as to motivate collaboration without creating an intrusion on Tribal culture? Participant 9 didn’t think so: “You know, in their draft water quality standards, they have uses just like the state does, beneficial uses, I found it really

interesting that one of their beneficial uses is “ceremonial use”, that is something I’d never encountered before. They won’t tell you exactly what it means, they’re private with their ceremonial stuff, but they’ll mention around the edges that it has to do with ingestion of the water right out of the creek, which is a human health issue they’re worried about.”

The Nez Perce Tribe is historically and culturally connected to both the salmon and steelhead populations as well as the water itself. Fish constituted a significant portion of the tribal diet, caught from lakes, streams, tributaries and rivers throughout their historical territory. “Simply put, Nez Perce people defined, and define, themselves in terms of their association with, and relationship to, fish and water, and other natural elements.” (Gudgell, Moore, & Whiting, 2006, pg. 567). These historical connections provide impetus for the Tribe to seek to improve and protect its natural resources, but this is altogether a reason not shared with non-Tribal parties. It is unlikely that non-Tribal persons can completely understand the motivations behind the Tribe’s actions, even if they empathize and support the Tribe’s actions.

Leaders cannot necessarily effect change entirely on their own. As Participant 4 said, “It [takes] political initiative... Within the Tribe, for instance, we have elected officials that are very concerned about the environment and natural resource health, and so they push science and technical agencies like myself to seek ways to increase the health of those resources.” Until the populations rally with their governments, there is a low probability for the rapid and dramatic success demonstrated by the Smoke Management Plan within the Lapwai Creek restoration. Participant 2 said that “[R]egulations...[are] a way to align the rest of the populations with their values. There’s not a misunderstanding, but a difference in

values, and so regulations, the law of the land, is a way to realign how people act, how they consume things.”

Conclusions about the Role of Trigger Points in Motivating Collaboration: What I analyzed from the interview data was that, unlike the air quality problems that resulted in the smoke management plan, there has not been a trigger point for the Lapwai Basin. While there have been important events in the area, from the listing of the waters as 303(d) impaired and legal decisions to low water years and algae blooms - none of these events, individually or collectively, have acted as a substantial enough trigger to cause interested parties to seek collaboration. The stakeholders in the Basin have the ongoing opportunity to collaborate on the creation of self-governing regulations. Neither the desire nor the motivation to create new regulations for water quality appears to exist within the government agencies that would be in charge of constructing them.

3. Multijurisdictional collaboration is not occurring in the Lapwai Watershed because all government entities lack sufficient funding.

The last of my research propositions investigated the role and importance of federal aid and enforcement within the Lapwai Basin. Participant 1 attributed the slow pace of change to their respective small sizes and budgets by saying, “[A]lmost every agency reacts. Most are not staffed or have the resources to be proactive.” An agency’s ability to obtain financial support is directly tied into the amount of proactive work that agency is able to undertake. According to Participant 8, “There’s always been an interest in restoration but it’s always depended on available funding and we’ve pursued those opportunities as they came up.” Participant 6 honed in on the difficulty of attaining funding for certain projects, “The

problem is you have to jump through a lot of hoops and it's not necessarily accessible. Unless they make a program, you have to try and apply to get aid.”

Role of Federal Government in Tribal Governance: The nature of the trust relationship between the Nez Perce Tribal Government and the United States Federal Government was brought up in terms of technical and financial support. Participant 7 said, “Our program is all driven by federal funding, we’re all dependent on EPA grants in this division. The federal government has a trust responsibility to the Tribe, so it’s pretty good at recognizing that, especially since [President] Obama.” Participant 4 felt that the Federal Government supported restoration efforts in spirit, if not in practice: “They listen quite intently when we suggest management practices, or when we apply for grants. They’re very supportive of our efforts in the basin and continue to provide technical support.”

Conflicts of Interest for Use of Funds: Participant 8 mentioned the difficulty in managing both financial needs of stakeholders and the environmental protection actions desired for sustainability. “The other thing I deal with is the conflict between economic interest and environmental protection.” While far from a unique struggle, it is a major one. Presumably farmers, ranchers, fishermen, and recreation-based professions seem at odds with the needs of fish, the ceremonial uses of the Nez Perce Tribe, and other environmental quality concerns.

Participant 8 articulated the decision-making process and compromises that often have to be made on an operational level. “[T]he wetlands are being impacted by grazing but the tribal land owners rely on the source of income from the grazing, so you can’t just say, ‘okay, there won’t be any more grazing in the wetlands, we have to protect them,’ which would be the ideal situation. But that wouldn’t be popular with the people who are making

money from grazing, so you have to weigh your options. Maybe fence off the most fragile wetlands and say ‘no grazing here’ but maybe sacrifice some of the less sensitive wetlands.”

The Role of Tourism in the Lapwai Basin: One participant saw the water quality improvements to the area as having a positive impact on tourism dollars being brought into the area: “I also see the benefits, the resource benefits to our economy. A lot of people come here and spend millions of dollars, you know, millions of people come here to recreate in the area and if you take some of those basically environmental benefits, they won’t be coming as much.” Participant 3 echoed this sentiment, saying “Most people spend, or more money is spent in this [the Clearwater] region than any other region in the state and that’s largely due to our steelhead fisheries.”

Tourist dollars aren’t going to be enough to support full restoration efforts in the Lapwai Basin. While the Tribal entities do receive technical and some financial support for their agency work, each grant and project must be pursued independently by the enacting agency. Participant 7 said that the “federal government provides the money for my position. We each work under our individual grants, and we each have our individual work plan that we need to follow. The funding agencies, of course, always encourage partnerships. So when we write a grant proposal, we include a paragraph that certain agencies are interested in this project.”

Maximizing Available Money: The agencies connected to the Lapwai Basin are currently and actively trying to work together. One participant mentioned that a week prior to our interview, there had been a four-agency meeting including representatives and staff, where they “get together and compare projects and try to see how we can help each other,

because leveraging dollars is a really effective strategy to make some real change in the watershed.”

There is a real sense that the government employees in the Basin are endeavoring to do their best that they can with the resources available. Participant 1 said that, in his experience, lack of participation from local populations is a good sign. “In government, I’ve come to figure out, if nobody’s complaining and nobody wants your head on a stick, you’re probably doing the right thing.” While this attitude is antithetical to collaborative governance - which relies heavily on stakeholder participation to plan development, implementation, and success – it is nonetheless an attitude that is prevalent among many private parties within the watershed.

Unfortunately for collaborative governance, financial support is often the key to stakeholder participation. As Participant 5 said, “I think it’s a priority on some level for restoration in the name of fish species, not just meeting water quality standards. That’s where the money is, it’s the low-hanging fruit from the BIA or EPA or Watershed Restoration. Any time you can tie in a benefit to habitat that’ll help Snake River Chinook or different salmonids they’re going to be able to rise up. And if you have the money, then you’ll be able to work more closely with the landowners where some of the changes need to be made within a watershed.” “The other reason is money. So if an organization is told, let’s say for the state of Idaho, if the federal government comes down with a rule and we have to adopt it, they say, we’re going to take this amount of money away from you or we’ll give you the money to do it, and so that can force someone’s hand for natural resources,” said Participant 6.

Conclusions for Future Governments Seeking Collaboration: The differences between the Smoke Management Plan and the watershed restoration plan are the most pronounced at this level of the analysis. The Smoke Management Plan had Tribal government and eventual EPA backing, both in aid and enforcement. The Smoke Management Plan regulated a smaller group of people, specifically Kentucky Bluegrass farmers, and those seeking a burn permit were required to pay \$2 per acre to get one. The program, therefore, helped support itself in conjunction with the general population support for the overall plan. Finally, the Smoke Management Plan was implemented on the Nez Perce reservation in phases, beginning with a voluntary stage. On some level, the ability to ‘opt in’ may have helped assuage some of the fears of farmers preceding the full implementation of the program.

The water quality in the Lapwai Basin is impaired from a variety of causes. Participants identified turbidity, reservoirs, nonpoint source pollution, climate change, logging operations, changes in snowpack, road management, septic tanks, agricultural use, sediment, channel modification, grazing by livestock, and domestic use as detrimental factors to water quality within the Lapwai Basin. Compare this list with the origin of the lowered air quality before the Smoke Management Plan – dangerous levels of particulate matter in the air from agricultural burning in one geographical area

Something like climate change is simply too complex to be tackled by any one entity. It is not just a matter of keeping water in the channel to improve the habitat for fish species. Even if the water is there, it is still subject to the myriad of other problems, for example, the lack of shade increasing temperatures or the changes to seasonal snow runoff. While stakeholders could decide to ‘opt in’ to a program by foregoing their water right allowance,

thus keeping more water within the watershed system, under Idaho's system of Prior Appropriation, doing so carries the risk of losing their water right altogether. Failing to put water to a beneficial use for a period of five years can result in a ruling of the abandonment of a diversion (Idaho Code 42-222(2)). Nonpoint source pollution is being addressed by the EPA through NPDES permitting systems and standards, but any change that could be achieved in the Lapwai Basin would be incremental and results would not necessarily occur quickly.

Lack of immediate, visible results within a watershed is an issue for almost every water manager and project, unavoidable by the very mechanics watershed operation in nature. Trees may be planted to provide shade, gravel may be added to improve streambeds, but it takes time for plants to grow and for riffles to form. In a political climate that requires measurable results to renew funding, projects like the one in the Lapwai Basin may not receive the necessary financial support needed. Furthermore, the majority of the users of the waters in the Lapwai Basin pull from the Lewiston Orchard Project infrastructure and storage reservoirs within the reservation. These are people over whom the Tribe can assert only minimal jurisdiction. The best hope for those agencies seeking environmental protective regulations is to work together and try to problem-solve as creatively as possible – something unlikely to occur until an event triggers collaboration or sufficient funding becomes available to encourage multi-governmental cooperation.

The most important resource in the Lapwai Basin is not the water, nor the air – but rather the people who are trying in good faith to make the best decisions they can, based on the best science available. Some of their motivations are personal, some are spiritual, and some are physical – but all are relevant to the pursuit of preserving a resource for coming

years. As one participant said, “There’s a lot to do in the basin, and the amount of work that’s going in there is only enough to make small differences. But I think they’re in the right direction.” The results from the Lapwai Creek Restoration Plan may not manifest as quickly as those stemming from the Smoke Management Plan, but incremental changes to protect and preserve our natural resources are still positive changes.

Unanswered Questions and Future Research

Considering the direction this research took, it is necessary to explore the questions it was unable to answer as well as how it could inform future research projects. First, I learned that my assumptions regarding the shared perception of an impaired watershed was not accurate; three of the participants thought the water quality was fine for use except for internal human consumption. Participant 2 said that they “are fortunate in the state of Idaho and particularly in this area to have good water quality” and that they “are fortunate to have good water quality here as a basic resource [because they] don’t have to make a lot of adjustments.” Without the data to back up the assumption that people want to improve the water quality within the Lapwai Basin, I end this project with a question of what could encourage dissenting parties to join in on protective natural resource regulation. As was previously discussed, the only trigger point to create such a result that I can predict would be some sort of external threat to the entire watershed, such as an outside private developer buying up land and water rights. This example, while possible, is highly improbable. It would be interesting for future researchers to explore the priorities of the parties within the Basin and explore any similarities that may exist that my interviews failed to uncover.

Second, future research could explore the role of power dynamics within an area with shared natural resources. How do perceived potential shifts in regulatory power impact the desire to collaborate? Similarly, do all parties have to have something to lose before they

are willing to attempt a cooperative approach to problem solving? Sovereignty was a big issue both in the literature and in my results, and if this project had been structured differently, I wish I could have explored the attitudes regarding tribal sovereignty within the Basin.

Finally, my personal devotion to the collaborative process has been put into question. The Lapwai Basin is small, both physically and socially. Typically smaller collaborative groups have greater success in finding workable solutions. I expected to find such an outcome in my research, and was disappointed when I did not. A future project could potentially compare the outcomes of natural resource regulations formed via collaboration versus those created thru an administrative, top-down approach.

As it is for most social scientists, I leave this research with more questions than I had when I begun. Perhaps this project will assist in future research.

Conclusion

There are three “big picture” conclusions I have drawn from this project. First, that collaboration is not occurring within the Lapwai Basin restoration on a scale large enough to effect significant change to the Basin’s ecological health. I began this project with the assumption that Lapwai Creek’s integrity as a water system was impaired, and that all entities within the Basin shared that assumption. What I found through my interviews was that not all agencies with a relationship to the Basin agree that the water quality is at risk. There is no need to seek a solution where not all of the parties perceive an existing problem.

Second, there has not been a trigger point in the Lapwai Basin to encourage reticent parties to seek collaboration. Until such an even occurs, collaboration between governments will be limited to small-scale, issue-by-issue interactions with incremental improvements.

When compared to the Nez Perce Smoke Management Plan, the Lapwai Basin restoration seems significantly less dramatic in almost every way. It might be easy to regard the two as disconnected, but as was contemplated by John Muir, “When we try to pick out anything by itself, we find it hitched to everything else in the Universe.” (1911, pg. 110). The natural resources and the people within the Lapwai Basin are linked together; the science and social needs of both must be taken into account.

Third, even if there happened to be a trigger point or the shared desire of the parties to collaborate on a project that would result in significant changes to the health of the Basin, available funding opportunities are limited in both size and scope.

These three points all contribute to the ultimate conclusion of my research; that until the parties are all able to agree on the existence of a water quality problem within the Lapwai Basin, continuing restoration efforts will be incremental and prolonged over time.

My assumption that the governments involved in the Lapwai Basin would benefit from the application of the collaborative governance framework is still intact, though tempered by the reality of the jurisdictional complexities of the existing checkerboard pattern of land ownership and the importance of funding to support large-scale restoration projects. I have seen first-hand the benefits that can come when parties reach across the metaphorical table to create a collaborative solution that addresses the priorities and needs of all involved. In time, the governments with authority over the water resources in the Lapwai Basin may be able find the financial and community support to pursue their desired protective natural resource measures.

One participant ended his interview with a sentiment that I believe sums up my research project succinctly: “The thing I don’t want you to walk away with is the perception

that it can't be fixed. It can. It's just going to take a greater public input and outreach into governing themselves to get there." Continued research, collaboration, and support for the people pursuing a healthier and more sustainable Lapwai Basin riparian system can only improve the quality of life for all who feel a connection to such a beautiful part of the world. Water is not only a place of strength, but a place to find the strength to talk to each other and to work together.

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33 USC 1281 – Pub.L 104-134, Title I section 101(e) Title III, April 26, 1996.

40 CFR 123.31 (2005).

42 USC 7407(a), as cited in *Safe Air for Everyone v. EPA*, 488 f.3d 1088 (9th Cir. 2007).

Clean Air Act, Section 110, 42 USCA 7410.

42 USCA 7410(o)

IDAPA 58.01.01, Rules for the Control of Air Pollution in Idaho, Idaho Administrative Code, Department of Environmental Quality. (5-1-94)

Idaho Code 42-222(2)

40 CFR 50.6(a), (c). October 17, 2006.

68 FR 2217-01; Approval and Promulgation of Implementation Plans; Idaho; Designation of Areas for Air Quality Planning Purposes; Idaho. (January 16, 2003).

APPENDICES

Appendix A

Research Permit from Nez Perce Tribal Executive Committee



Nez Perce

TRIBAL EXECUTIVE COMMITTEE

P.O. BOX 305 • LAPWAI, IDAHO 83540 • (208) 843-2253

November 28, 2012

Ms. Lacey Rammell-O'Brien
5690 N. Locust Grove Rd
Meridian, Idaho 83646

Dear Ms. Rammell-O'Brien:

Your application for Research Permit was approved by the Nez Perce Tribe Executive Committee (NPTEC) at their meeting on November 20, 2012.

Your project, "to research the external pressures that influenced the Nez Perce Tribe to undertake the creation and enforcement of the Smoke Management Plan as well as regulations to improve the water quality in its borders," will be important to share with this Tribe before it is presented to your committee who will be reviewing this research project. We wish you well as you proceed towards this project.

There is a fee of \$75.00 for the Research Permit and you may mail it to the Nez Perce Tribe-Cultural Resource Program, PO Box 365, Lapwai, Idaho 83540. An evaluation Form is enclosed for you to complete upon finishing your project.

Sincerely,

A handwritten signature in black ink, appearing to read "Silas C. Whitman".

Silas C. Whitman
Chairman

Appendix B

Approval Letter from University of Idaho Institutional Review Board

University of Idaho

December 11, 2012

Office of Research Assurance

Institutional Review Board

PO Box 443010

Moscow ID 83844-3010

Phone: 208-885-6162

Fax: 208-885-5752

irb@uidaho.edu

To: Long, Jerrold
Cc: Rammell-O'Brien, Lacey

From: Traci Craig, PhD
Chair, University of Idaho Institutional Review Board
University Research Office
Moscow, ID 83844-3010

Title: 'Crisis Points in Multijurisdictional Natural Resource Regulation:
Lapwai Basin Case Study'

Project: 12-332
Approved: 12/11/12
Expires: 12/10/13

On behalf of the Institutional Review Board at the University of Idaho, I am pleased to inform you that the protocol for the above-named research project is approved as offering no significant risk to human subjects.

This approval is valid for one year from the date of this memo. Should there be significant changes in the protocol for this project, it will be necessary for you to resubmit the protocol for review by the Committee.



Traci Craig

Appendix C

Collaborative Governance Conceptual Framework

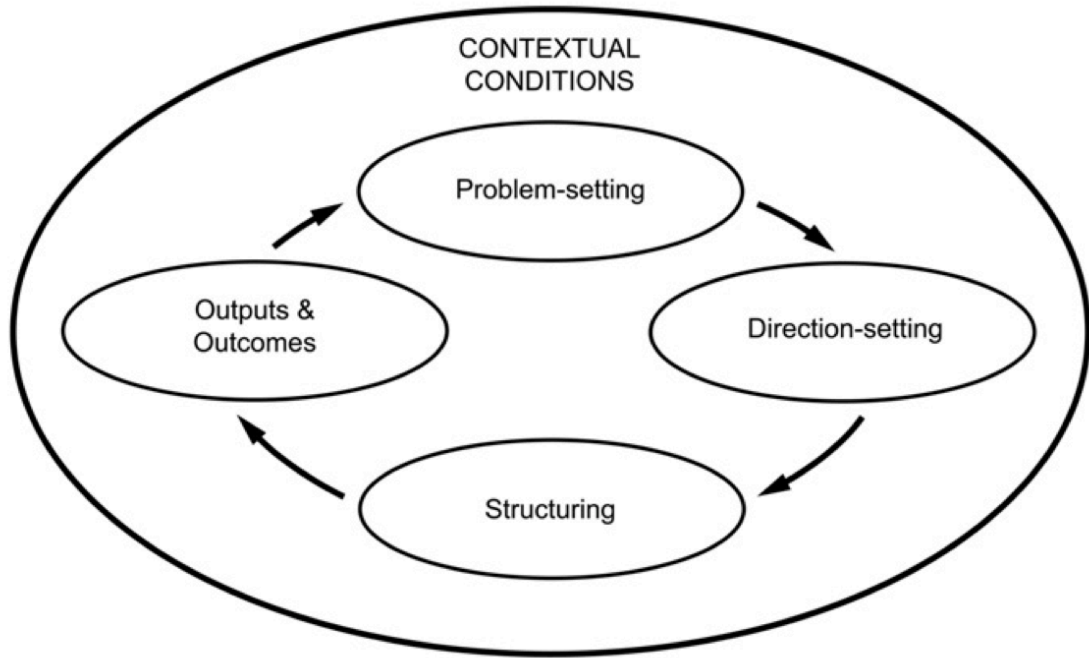


Fig. 1. Conceptual framework for collaborate governance.

Fish et al (2010).

Appendix D
Interview Instrument

- (1) How familiar are you with the Lapwai Watershed?
- (2) How would you characterize your interaction with the Watershed?
- (3) How would you characterize your role in water quality within the state of Idaho?
- (4) Do you perceive any threats to water quality?
 - a. Do you perceive any threats to or stemming from the Lapwai Watershed?
 - b. How pressing do you perceive those threats to be?
- (5) Do you perceive other people/agencies believing there are threats stemming from water quality?
- (6) Is it worth it to you to implement regulations to improve water quality?
- (7) Have members of the public proposed an increase or decrease in regulation to you?
- (8) Do you feel, as an agency, that you have support from the Federal Government?
 - a. If so, what form does that support take?
- (9) What are your perceptions of current restoration attempts in the Lapwai Basin?
 - a. Are you involved in the Lapwai Basin restoration?
 - b. What do you think motivates the people in charge of implementing the Lapwai Basin regulations?
- (10) In your experience, what motivates people to adopt regulations in general?
 - a. For natural resources?
 - b. For water sources?
- (11) In your experience, what motivates agencies to adopt regulations?
- (12) Are you exploring any alternative sources of water?
- (13) Is there anything else about the Lapwai Basin (Restoration Plan) that you think I should know?
- (14) Are there any other (Nez Perce Tribal) Government Employees that you think I should talk to?

Appendix E
Interview Pool

Assessor
Coordinator
Director
Manager
Manager
Manager
Planner
President
Quality
Scientist
Supervisor

ⁱ <http://www.researchware.com/company/about-researchware.html>

ⁱⁱ <http://www.epa.gov/air/cleanairawards/winners-policy.html>

ⁱⁱⁱ <http://www.epa.gov/air/cleanairawards/winners-policy.html>

^{iv} <http://www.epa.gov/air/cleanairawards/winners-policy.html>