

A POLICY ANALYSIS OF
THE FEDERAL ENERGY REGULATORY COMMISSION'S
HYDROELECTRIC RELICENSING PROCESS

By

Jay D. Wright

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Approved by the Master's Thesis Committee:

Noah Zerbe, Major Professor Date

Elizabeth Watson, Committee Member Date

Marlon Sherman, Committee Member Date

Selma Sonntag, Graduate Coordinator Date

Christopher A. Hopper, Dean for Research and Graduate Studies Date

ABSTRACT

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Jay D. Wright

In this thesis, the FERC's hydroelectric relicensing process is examined from a historical perspective. It finds that strong federal control to ensure a comprehensive plan for private capital development of hydropower was necessary in the early development era and expansion of the United States economy. Over time, Congress and the courts have devolved this centralized decision-making authority away from the FERC and shared it with a plurality of other federal and state agencies. The Electrical Consumer's Protection Act requires that the FERC give equal consideration between the needs of development with the needs of environmental protection. This shift brought the process substantially inline with a changing public desire for species protection and environmental preservation.

The Klamath River relicensing provides a case example to analyze the impacts the process has on watershed communities. Restoration of ecosystems is increasingly seen as a means to achieve economically viable communities and preserving traditional cultural ways of life. Whether the FERC and its relicensing process will be staged to enter a new era in riverine management, and the reasons why it may not change constitute an important research question. Semi-standardized interviews with Klamath relicensing participants were conducted to evaluate the strengths and limits of the process. The

analysis focuses on the FERC's comprehensive planning mandate, the FERC's consideration of preserving the tribal trust and sovereignty, and the issue of timeliness in obtaining relicensing decisions. This thesis finds that the FERC must further modify its relicensing process to consider holistic notions of ecosystem management in order to obtain fundamental restoration outcomes.

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CHAPTER ONE

INTRODUCTION

The purpose of this research project is to gain a greater understanding of the Federal Energy Regulatory Commission's (FERC) hydroelectric relicensing process. Dams are not the environmentally benign objects their developers and society once thought they were. It is appropriate that the policy process by which they are granted new operating licenses changes to reflect this shift in society's evaluation of them. This thesis traces a broad transition from a developmental era in watershed management to a desire for fundamental restoration outcomes.

The FERC relicensing process has undergone numerous changes from its original form. The FERC recently adopted a new relicensing procedure known as the Integrated Licensing Process (ILP). The ILP is supposed to improve process efficiency, predictability, and timeliness and improve the quality of decision-making in the hydropower licensing process. This thesis will explore the evolution of this process and its impacts on watershed communities with concentration on the adversarial nature of the process.

The FERC relicensing process traditionally favored the interests of public utilities or private operators of hydroelectric projects. In other words, most relicensings resulted in status quo decisions. Legislative changes such as the Electrical Consumers Protection Act of 1986 required FERC to give "equal consideration" in licensing decisions between power generation, protection of fish and wildlife, enhancement of recreational

opportunities, and preservation of environmental quality. These changes are generally seen as positive enhancements to the relicensing process for those segments of society desiring a return to more natural river ecosystem management. However, the FERC relicensing process has grown notoriously adversarial with some cases dragging on for more than a decade.

The FERC grants operating licenses to approximately 1,011 hydroelectric projects in the United States. Of these, approximately 220, or 20% of all hydroelectric generating capacity in the United States will come up for relicensing within the next 15 years (Sensiba, 1999, 610). Without an efficient policy process, the FERC will simply not be able to carry out its mandate to conduct the required relicensings in the coming decades. In a more open and decreasingly regulated energy market, long drawn out relicensing processes detract from hydroelectricity's ability to maintain an economic edge compared to other energy sources. However, the FERC's strive toward bureaucratic efficiency in streamlining the process from five years down to only 17 months may create an unequal power dynamic and disadvantage several relicensing participants. This will be shown to be counterproductive to developing a comprehensive plan considering restoration of the ecosystem.

Chapter Two provides a review of the literature utilizing a historical account of the FERC and the Federal Power Act. This chapter traces the roots of America's involvement in the federal management and control of the public waterways resource. It will demonstrate why a highly centralized and pervasive authority was required for the development and rapid expansion of the economy. The Progressive Era brought with it

the concept of limited license terms to prevent monopoly and ensure the public interest was re-evaluated upon relicensing of non-federal hydroelectric dams. The Environmental Era devolved the FERC's authority and shared it with a plurality of other federal and state agencies. Finally, this chapter concludes with sections considering dam decommissioning upon relicensing, a transition to a more streamlined relicensing process, and how the FERC intends to interact with tribal governments in relicensing proceedings.

Chapter Three builds upon the general literature review by focusing on a specific case example of an ongoing FERC relicensing. The Klamath River is ecologically complex and traverses numerous political jurisdictions. Given those two broad parameters, a theoretical model for predicting restoration outcomes is presented. A short historical overview of the Klamath Basin controversy is followed by a description of the Klamath hydroelectric project. A summary of each of the major stakeholders in the Klamath FERC relicensing and their relative positions is provided. This chapter concludes with sections considering the option of settlement negotiation as an alternative to the traditional FERC relicensing process and a description of how one other group is working throughout the Basin to build consensus in achieving restoration outcomes.

Chapter Four presents an analysis of the FERC hydroelectric relicensing process and the Klamath case example. The analysis utilizes qualitative data obtained from semi-standardized interviews with stakeholders involved in the Klamath relicensing to evaluate the strengths and limits of the FERC relicensing process. It presents three key findings suggesting that the FERC relicensing process may be inadequate to enter into a restoration era in watershed management. These findings relate to, first, the FERC's

comprehensive planning mandate, second, the nature of tribal trust and sovereignty in relicensing, and finally, the issue of timeliness in relicensing proceedings.

Chapter Five concludes the thesis by considering the impact the FERC relicensing process is having on watershed communities and offers recommendations for improving the process. Since this thesis utilized an ongoing case example, a post-script analysis is offered. This analysis demonstrates how a recent filing by the federal fisheries agencies to the FERC should make predicting the outcome of the relicensing much easier.

CHAPTER TWO

HISTORY OF THE FERC AND THE FEDERAL POWER ACT

Introduction

A broad historical overview of the Federal Energy Regulatory Commission (hereinafter referred to as, “the FERC”) would paint a picture of an agency having its foundations in the most central of state functions, namely commerce, and the navigability of its inland waterways. Out of this foundation, the Congress granted the Federal Power Commission (predecessor to the FERC) an unusually broad, sweeping authorization to regulate the management America’s rivers (Spence, 1999, 427; Stephenson, 2000, 485). Over the years, this relatively unfettered regulatory power has been conditioned through numerous court cases and Congressional legislative mandates bringing us into a modern era of hydroelectric relicensing exhibiting a greater degree of agency interaction (Blumm & Nadol, 2001).

Understanding the history of and progression of legislative developments that have ultimately led to the present-day form of the FERC is critical to understanding the current debates existing in relicensing decisions. This discussion relates to the essential tensions existing among tribal concerns, environmental preservation values, and private industry’s desire for development and anxiety over property values. A historical presentation of hydroelectric licensing (and relicensing) policies under the Federal Power

Act will demonstrate how changing conceptions of what constitutes “the public interest” have been largely responsible for the evolution of the FERC’s organizational behavior. Taking an overall historical view will first reveal progressive of expansion of federal powers granted to the FERC under the Federal Power Act, followed by a series of retractions of the same powers, eventually leading to the modern era of FERC relicensings.

This chapter will introduce the reader to a somewhat obscure federal agency, of which the general public is likely to have little understanding. It will trace the roots of management and direction for the oversight of our nation’s public waterways and follow the changes in public interest over time. It is not intended to be an all-encompassing historical account from inception to the present-day form of the FERC or the Federal Power Act. Instead, it is focused on the key areas of controversy obtained through a review of the literature. By the end of this chapter, the reader should be prepared for the following chapters focusing on the specific case example of an ongoing hydroelectric relicensing in the Klamath River Basin.

The Developmental State, Defining Core Economic Imperatives

The first federal involvement in the regulation and management of America’s rivers was found in the River and Harbors Act of 1890, which gave the Army Corps of Engineers authority to remove obstacles to navigability. The Act “directed the Secretary of War to notify Congress of structures placed in navigable waters that could affect navigation” (Bryant, 1999, 49; Mizejewski, 1997, 746). The Corps’ main duty under this

act involved removing obstacles such as tree stumps and snags. In addition to removal of obstacles, the Rivers and Harbors Act also prohibited the building of obstructions on navigable waterways that were not expressly authorized by Congress (Bryant, 1999, 102). This important precedent set the stage for later regulation of dams as they came to be defined as obstacles to navigation and commerce on America's rivers. Prior to the enactment of the Federal Water Power Act of 1920 and the subsequent creation of the Federal Power Commission, the Corps of Engineers was essentially the only federal agency having jurisdiction in the management of inland waterways.

The roots of the Federal Government's role in the regulation of navigable waterways can be traced to the Commerce Clause of the U.S. Constitution. The federal government has always maintained an unchallenged authority to regulate interstate commerce. The Commerce Clause is one of the few articles of the Constitution that specifically grants power to the federal government rather than reserving it to the states (Witt & Congressional Quarterly inc., 1989, 87). In the early history of the United States, prior to the railroad and interstate highway systems, navigable rivers and waterways were the primary conduits for interstate commerce. In fact, in the 1824 Supreme Court case of *Gibbons v. Ogden* the relationship between interstate commerce and the power to regulate interstate navigation was defined. Chief Justice John Marshall ruled that,

Commerce, undoubtedly is traffic, but it is something more—it is intercourse...All America understands and has uniformly understood, the word commerce to comprehend navigation...The power over commerce, including navigation, was one of the primary objects for which the people...adopted their government, and must have been contemplated in forming it. (cited in, Witt & Congressional Quarterly inc., 1989, 85)

Thus, in the eyes of the U.S. Congress, commerce and navigation are essentially synonymous terms (Bryant, 1999, 100). The definitions of which portions of waterways are in fact navigable and available for commerce have always been a moving target in legislation. As will be shown later in this chapter, the courts have been quite generous in granting federal powers over portions of rivers that are non-navigable, even though such management can affect downstream navigation and commerce. The *First Iowa v. FPC* Supreme Court case in 1946 is the most significant example. Charles Sensiba finds that this case was seminal in granting exclusive power over the management of America's rivers to the federal government. He states, "[that the Court's finding] placed the Commission in sole command of the hydropower licensing process, freeing it from impediments caused by any shared decision-making with the states in the licensing process" (1999, 615).

The role for regulation of navigability on U.S. waterways becomes especially significant when considering private property rights. Normally, when the federal government establishes a right of way or takes property for a project, the property owner must be duly compensated for such takings. However, as Beth C. Bryant has noted, the navigation servitude, or "rule of no compensation" means that Congress can take private property without compensation if the taking is necessary for the establishment of its navigation powers (1999). Navigation servitude will become a more salient part of this thesis in a later section considering the FERC's 1994 Dam Decommissioning Policy Statement. This policy becomes especially significant when considering what lies in the public interest and who pays the costs of dam removal. The unusually strong authority of

the Congress stemming from the Commerce Clause of the Constitution is later vested in the Federal Power Act, which ultimately gives the FERC powers other federal agencies simply do not possess.

The FERC views takings as necessary to maintain the core functions of the state. Briefly, the core functions of the state are: domestic order, survival, and revenue generation that is closely tied to an economic imperative to secure capitalist growth (Dryzek, 2003). In the early history of America, rivers provided for the core economic functions of the state service through development of navigation and commerce. Later, dams provide for the core economic function through irrigation of farmlands and the concomitant westward expansion of the nation. As technology for electrical power transmission over long distances improved, dams provided for the core economic function through harnessing rivers for hydroelectric power development. As one senior policy advisor to the Bonneville Power Administration stated in an article titled *Is Hydropower an Endangered Species*, “Unquestionably, hydropower development in the early twentieth century served as a major source of economic growth and stimulation for a growing industrialized society” (Johansen, 1994, 13).

On the other hand, in the modern era, the hydroelectric power industry increasingly views FERC relicensing decisions that impose economically unviable operating conditions without just compensation as a form of regulatory takings. Their argument generally holds that if the FERC must impose conditions that no longer make the project profitable—such as requirements to include fish passage, or reduced instream flows that impair their ability to generate power—the Congress should implement section

14 of the Federal Power Act (FPA). Although it has never been implemented, section 14 of the FPA affords an opportunity for federal takeover at the end of a licensing period. Author Beth Bryant strongly disagrees. She argues that section 14 of the FPA was intended to prevent monopoly and create a mechanism for federal takeover only if the project remained in the public interest (Bryant, 1999, 117).

The Post Civil War Industrial Era and the Economic Expansion of America

Following the Civil War, technology enhancements for electricity generation had developed to a point where Congress saw a need for legislation that specifically addressed hydropower development versus simply defining obstructions to navigability. It passed the General Dam Act of 1906 with later amendments in 1910. This act was intended to allow for development of dams via private capital by requiring potential developers to submit plans to the Secretary of War (Sensiba, 1999, 614). Private capital development of hydropower probably seemed logical in the post-Civil War era as federal coffers were drawn down owing to the war effort. Additionally, private development of the railroad system had proven effective at stimulating interstate commerce. The General Dam Act however failed to achieve the desired objectives of stimulating private capital development. The Federal Power Commission annual report of 1921 notes, “between 1910 and 1920, only five federally authorized hydroelectric projects were constructed, which combined to produce 47.2 megawatts of electricity” (Sensiba, 1999, at n77).

The major problems encountered in implementing the General Dam Act came down to jurisdictional boundary issues between the states. This is where the comparison

between the economic development of railroads and waterways begins to break down. Watercourses and suitable dam sites exist in relatively finite places and well-defined political jurisdictional boundaries. The development of railroads, on the other hand, requires a much greater degree of autonomy in routing and federal right-of-way decisions. Unlike the case of river navigability and the Commerce Clause, the case of eminent domain federal takeovers of private property land holdings results in just compensation being paid to the rightful owner. Rather than implementing a piecemeal approach to hydropower, the Congress began to see the need for a comprehensive plan for the development of U.S. waterways (Sensiba, 1999). A common theme throughout much of the literature is an argument over who should rightfully have the power to construct a comprehensive plan for waterways development. Should authority to create a comprehensive plan be retained by a centralized bureaucratic agency such as the FERC, or should it be shared via a plurality of various state, federal, and tribal agencies? This is an especially important theme to consider because it addresses both expansions and contractions of the Federal Power Commission's, and later, the FERC's, authority in licensing decisions. More specifically, the question of who has the authority to generate comprehensive waterways development plans is related to changing societal conceptions of what lies in the public interest with respect to the dominant uses of our rivers.

Progressive Era Reforms and an Expansion of Centralized Bureaucracies

Between the preceding phase in U.S. history and the ultimate enactment of the Federal Water Power Act in 1920, and later the Federal Power Act in 1935, a broader debate over development of natural resources emerged. This debate was signaled by the creation of Progressive Era conservationist reforms. Essentially, Progressive reformers saw the increasingly urban character of the country, combined with increasing monopolization within private industry, as threats to the democratic character of governance. They were especially wary that private development and monopoly hydroelectric power industry development of the waterways would lead to a loss of a common public resource (Blumm, 2002, 89). The Progressives were fearful that monopolization within the power industry would lead to such increased and runaway rates that it would fail to stimulate rural development initiatives. Out of this debate, we can see the seeds of our present day system of limited license terms for non-federal dams. Fifty-year terms provide sufficient stimulation for private development, yet also provide a means of preserving the public trust by allowing for federal recapture at the end of the term.

In addition to the Progressive's fears of monopolization of America's waterways by private industry in hydropower development, they also fought against narrowly defining dams as obstructions to navigation. "The Progressive Conservationists sought to give equal consideration to river uses other than navigation, such as irrigation and energy production, in an effort to maximize the efficient use of river systems" (Mizejewski,

1997, 745). Just as occurred in the Forest Service under Gifford Pinchot's term, the Progressive Era reforms in watershed development were heralded by a transformation from narrow uses of resources, to scientific management principles and multiple use mandates.

This period was also marked by a rise in centralized bureaucratic agencies seeking to place the nation's resources under more rational and scientific forms of management. So-called "Weberian Bureaucracies" arose out of a need to break down complex problems into more discrete sub-units (Dryzek & Schlosberg, 1998, 83). In simplified terms, each sub-unit was broken down into separate governmental agencies based on lines of scientific discipline (i.e., Fisheries, Forest Service, etc). At the time, however the division of resource management into bureaucratic sub-units was deemed necessary in order to counter the threat of exploitation of resources from elites within private industry. This strategy gave rise to a professional cadre of bureaucratic scientific elites within distinctly divided and hegemonic governmental agencies. The proximate result of all this separating out of governmental functions is antithetical recent conceptions of holistic ecosystem management principles. However, as George Gonzalez has suggested, the Progressive Era reforms only led to much greater agency capture by economic elites and an increased level of federal policies resulting in a more rational and favorable business climate for private industry. Gonzalez finds that this continued political dominance of the economic elite has two major implications:

First, the continued dominance of this group means that the relationship between humankind and the environment will primarily be mediated by the market...[and], the second implication of economic elite political

dominance is that ecological science advocates have only had a limited and sporadic effect on environmental policy in the United States. (2001, 123)

This debate still exists today when considering the terms of dam relicensing for multiple uses and new environmental values versus only those of the hydroelectric power operator. It also has bearing on whether decentralized watershed basin management initiatives with multiple stakeholder involvement can take hold, or whether the management decisions affecting watershed users will continue to be made from afar owing to the national interest.

On the Conservationist side of the debate were most notably President Theodore Roosevelt and Gifford Pinchot. They argued for strong federal control over licensing terms and fought to ensure monopoly control over a public resource would not occur by issuing indeterminate public-utility franchises (Costenbader, 1998, 648). This argument can be summed up by the comments of Gifford Pinchot in a footnote to the landmark *First Iowa v. FPC* case in the Supreme Court. The majority opinion quotes him as follows:

With all its faults the Federal Water Power Act of 1920 marked a great advance. It established firmly the principle of federal regulation of water power projects, limited licenses to not more than fifty years, and provided for Government recapture of the power at the end of the franchise.

For the first time, the Act of 1920 established a national policy in the use and development of water power on public lands and navigable streams. ("*First Iowa v. FPC*," 1946, at n23)

Rather than relying on the piecemeal approach of the General Dam Act of 1906, the Federal Water Power Act of 1920 granted very powerful central regulatory control

over hydropower development to a single federal agency. The majority in the First Iowa case found that this central licensing authority was pervasive by noting, “a dual final authority, with a duplicative system of state permits and federal licenses required for each project, would be unworkable” (Blumm & Nadol, 2001, 5; Sensiba, 1999, 615). As discussed earlier, this case created a significant expansion of the Federal Power Commission’s authority. A later discussion will consider significant contractions to the FPC’s authority via section 4(e) mandatory conditioning from federal land management agencies, and section 18 fishway prescriptions from the fisheries agencies. For now, it is worth noting that the pervasiveness of the FPC’s authority was (only) limited in 1921 to exclude National Parks and Monuments (“*First Iowa v. FPC*,” 1946, At n17).

The Federal Water Power Act (FWPA) of 1920 is the essential piece of legislation creating elements of a centralized federal licensing authority still in existence today. Prior to this act, the individual Secretaries of War, Interior, and Agriculture each issued licenses for hydroelectric projects on lands falling under their own respective jurisdictions (Blumm & Nadol, 2001, at n45; Costenbader, 1998). It should also be noted that the FWPA was in effect well before the era when the federal government itself got directly into the dam-building business via the Bureau of Reclamation and Army Corps of Engineers. The Secretaries still comprised the Federal Power Commission when the FWPA transitioned into the Federal Power Act. It was not until an additional reorganization in 1930 that the current five-member Presidential appointed independent Commission was created. This could also be seen as an important step toward placing the management of waterways more in-line with the broader public interests. Whereas

the Rivers and Harbors Act vested power to regulate river obstructions solely with the military, the FWPA shifted this power to the Congress (Costenbader, 1998, 646).

The transition from a Commission comprised of Secretaries to an independent body will become a significant factor later when discussing how the conditioning authorities of the land management agencies and the fisheries agencies affected licensing decisions and outcomes. Under the former three-member Secretarial Commission there were neither the essential conflicts of interest between the departments nor the attendant adversarial proceedings we are witnessing in the modern-day era of relicensings (Sensiba, 1999, at FN 83). This creates an interesting paradox in government. We commonly assume that plurality in government creates a greater common good for the citizens. However, if governmental proceedings are locked into adversarial relationships between the various bodies, how does the delay in a final licensing agreement serve the public interest?

The Federal Water Power Act itself was later renamed the Federal Power Act (FPA) in 1935. During this step, the act made mandatory rather than discretionary the requirement to file with the Federal Power Commission intentions to construct any hydro project having an affect on the navigability or commerce of the waters of the United States (*First Iowa v. FPC*). The original Federal Power Commission “was created, in part, out of fear that the American involvement in World War I had depleted coal and oil reserves to dangerously low levels, and that waterpower provided an effective alternative energy source” (Pinney, 2003, 365). President Wilson responded in 1917 by presenting a draft water power bill to Congress that would create a more comprehensive scheme for

water power development. In making the nation's water power legislation more comprehensive by granting the federal government sole power to grant licenses, it created a more stable and standardized scheme for private development. Prior to this, a developer would face a more confusing mix of state and local regulations (Mizejewski, 1997, 746).

In a similar vein of thought, the modern-day FERC was created out of a perceived threat to our national security owing to an increasing shortage of non-renewable energy sources emerging after the fallout of the Arab oil embargo. In this later case, hydropower was increasingly promoted as a means to maintain long-term energy independence (Pinney, 2003, 368). Warfare seems to bring our nation's energy policy intentions sharply into focus and at center stage in the national debate. It especially illustrates how wider societal values can shape agency decisions concerning individual dam relicensing cases. The FERC has traditionally responded to and shaped its policies to comport with broader societal factors at play during any particular era. During wartime administrations, it has been easier for the federal agencies to respond with increased developmental interests over environmental preservation values.

One of the major issues of contention with the Federal Power Act has always been over which agencies are best suited for drafting a "comprehensive plan" for river development. Section 10 (a) of the FPA calls upon the Federal Power Commission to license projects to:

...be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power

development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial uses...(Costenbader, 1998, 648)

If the era calls for rapid development to meet a wartime capacity or promote westward expansion, then the increased efficiencies of vesting that power within one centralized agency is a logical choice. Additionally, during the Progressive Era, the emphasis was on creating greater efficiencies in the federal natural resource agencies by placing greater reliance upon scientific management principles. Each agency became increasingly insular and compartmentalized by their respective areas of expertise in science. Keep in mind that during the Progressive Era, hydroelectricity was still the major source of power for a rapid surge in the industrial economy. It was only logical that one agency should be charged with having its steady hand on the tiller when it comes to creating comprehensive waterways development.

On the other hand, during the Environmental Era, the various land management and fisheries agencies gradually were vested with a plurality of power to create comprehensive waterway development plans in consort with the FERC. Following the previous logic, this shifting of the management priorities over waterways made sense, as other sources of power generation gradually increased in efficiencies, market share, and competitiveness over hydropower. As a result, the public interest in waterways management had greater freedom to shift from developmental to environmental preservation values. Once the heavy burden of rapid developmental pressure to meet the needs of industry were no longer solely vested in hydroelectricity, logic dictated the placing of greater checks and balances in the public policy process. In response,

Congress and the courts have re-shaped the contours of the FPA to reflect growing environmental preservation values. Thus, the advance of technology has made the expression of the public policy process ideology possible. How this expression of a public policy ideological shift from centralized control to decentralized management principles occurred will be covered later when considering the Electrical Consumer's Protection Act of 1986 and the FERC's 1994 Dam Decommissioning Policy Statement.

The Environmental Era Policy Reforms and a Devolution of FERC's Authority

The modern day Federal Energy Regulatory Commission emerged during the Carter administration in response to a national energy crisis fueled by the OPEC oil embargoes. The Department of Energy Organization Act of 1977 created the FERC, which replaced the former Federal Power Commission. This act also created the Department of Energy within the executive branch ("Department of Energy Organization Act," 1977). The major thrust of the Carter administration was on decreasing the demand side of the energy equation. One major exception to this pattern as it relates to this thesis was the passage of the Public Utility Regulatory Policies Act (PURPA) of 1978, which paved the way for a massive spike in new small scale private hydro projects being licensed by the FERC (Spence, 1999, 428).

The 1992 Energy Policy Act paved the way for major deregulation of the electric utilities sector and increased corporate investment in the public utilities. This factor will ultimately be shown to decrease the competitiveness of hydropower relative to other sources due to the increasingly complex relicensing picture and imposition of mandatory

conditions by the agencies. In addition to the deregulation of the wholesale energy market by the FERC after passage of PURPA, several other regulatory factors have combined to create an uncertain market future for hydropower. These are: the National Environmental Policy Act (NEPA), the Clean Water Act, the Endangered Species Act, and the increased adversarial relationship in relicensing garnered by the plurality inherent in the Electrical Consumer's Protection Act (Costenbader, 1998, 667). Additionally, other conditions have been placed upon the industry operators to consider funding nonpower uses such as: recreational enhancements, instream flow, and historical preservation. These have further challenged hydropower's competitiveness by requiring "visitor parks, recreational flow regimes, fish and wildlife facilities, and flood control regulations to protect local communities" (Johansen, 1994, 14).

In addition to the Energy Department reorganization, the Environmental Era also saw the rise in status of new agencies such as the Environmental Protection Administration (EPA). Although the EPA oversees the Clean Water Act (CWA), it delegates authority for enforcement to the states. Chapter Three will show how Section 401 of the CWA creates a significant diminishment of the FERC's pervasive authority in relicensing decisions, insofar as it affords the states exclusive authority for designating beneficial uses of waterways and for setting water quality standards to meet those intended uses. Thus if the states lost authority to define navigability in a previous era, they gained an important hammer in FERC relicensing decisions by forcing the licensed operator to comply with water quality standards which are growing more restrictive over time.

Electrical Consumer's Protection Act (ECPA) of 1986

The ECPA amendments to the Federal Power Act created the largest legislative shift in the balance of powers between the agencies involved in hydroelectric relicensing process, consistent with a broad historical movement away from centralized agency control of waterways development toward a shared plurality between various federal and state agencies. Lydia Grimm characterized this need for a shift because, “FERC sees itself as an energy agency making decisions that affect power needs and economics rather than an environmental agency making decisions that affect natural resources” (1990, 930).

The origins of this public law related to a debate over how the FPA traditionally gave preference to public utilities in relicensing over private corporations (Grimm, 1990). The ECPA removed this preference, but installed new environmental values to ensure its passage. It further refined what is in the public interest in hydropower relicensing by codifying important environmental and conservation goals. This shift in the public interest spectrum in relicensing is consistent with the overall trend from the development era to the Environmental Era. The legislative compromise of the Progressive Era policy of municipal preferences giving way to private industry in order to sweep in the environmental values also signals a transition in relicensing policy away from state control to more free market environmentalism and liberal market economics. Specifically, the ECPA amended section 4(e) of the FPA to read:

In deciding whether to issue any license under this Part for any project, the Commission, in addition to the power and development purposes for

which licenses are issued, shall give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality. ("ECPA," 1986)

It should be noted however that both houses of Congress debated the language of this law. In a compromise, the Republican Senate prevailed in adopting the “equal consideration” clause with respect to balancing between the public interests in power generation and fish and wildlife preservation. The Democratic House on the other hand wanted to adopt considerably stronger terminology that would have required “equitable treatment” between the interests of power and conservation (Lowry, 2003, 47). The treatment standard preferred by the House would have required substantial change in actual outcomes whereas merely giving consideration allows the FERC to evaluate alternatives, but then ultimately reject them. Obviously, the adopted language gives the FERC considerably more latitude in construing the public interest terms in relicensing decisions. This ability of the FERC to evaluate and consider the various public interests in a particular case is consistent with their characterization as a “quasi-judicial body” that can only “call balls and strikes” (Echeverria et al., 1989, 21).

In a contrary viewpoint of the FERC’s role, Bryant quotes the findings of the 2nd Circuit Court in *Scenic Hudson Preservation Conference v. FPC* (1965). Specifically, the Commission’s role with respect to defining the public interest “does not permit it to act as an umpire blandly calling balls and strikes for adversaries appearing before it, the right of the public must receive active and affirmative protection at the hands of the

Commission” (1999, 120). Regardless of the adopted language or whether the FERC does or does not “blandly call balls and strikes,” the ECPA amendments did result in a substantive reform of the federal hydropower policy.

Whether or not the ECPA actually achieved the desired objective intended by Congress to modify the FERC’s status quo tendencies was the subject of a report utilizing multiple regression models to test theories of agency behavior. With respect to the equal consideration required by the new legislation, the authors of this report characterized the change as, “ECPA effectively transformed FERC’s responsibilities in river management from a single-purpose objective for hydropower development to a multiple-use mandate” (Moore et al., 2001). In the report, the authors tested three main hypotheses:

1. Whether the ECPA resulted in the FERC accepting more fish and wildlife recommendations in license renewals as a result of Congress exerting direct hierarchical authority.
2. Whether the FERC bureaucracy insulated itself from the wave of strong environmental platform appointments made in 1993 by Clinton to the federal agencies and the chair of FERC.
3. Whether inputs from interest groups such as environmental NGO’s, the federal fisheries agencies, and state fisheries agencies affected the FERC’s acceptance of environmental recommendations. (Moore et al., 2001)

In their analysis, the authors found statistical evidence for five major conclusions. First, the fish and wildlife agencies used the ECPA correctly as a mandate to increase the number and aggressiveness of recommendations to the FERC for protection of fish and wildlife resources. Second, Congress did in fact successfully reform the FERC decision-making by exerting hierarchical authority through the ECPA. Third, ECPA achieved substantive reform in the federal hydropower policy. Fourth, the FERC was not fully

capable of using its internal bureaucracy to insulate itself from the executive branch control. And fifth, interest group recommendations are more likely to be implemented by FERC when the hydroelectric relicensing project involves public lands (2001).

In addition to modifying section 4(e) to create a balance between environmental versus development values, the ECPA modified the FPA in two other important ways. First, Section 10(a) raised the status of fish and wildlife agencies by requiring the FERC to consider the resource agencies recommendations for how best to create a comprehensive plan for non-development resources. If the FERC considers but then rejects the fish and wildlife agency recommendations, it must publish its reasons for doing so in the federal register. Second, the FERC must now consider the cumulative impacts of multiple projects in a single river basin (Spence, 1999).

In effect, the above analysis shows how despite its traditional intransigence to change over status quo, the FERC is subject to changes in the public interest when faced with the proper inputs from the Congress. The ECPA did launch a new era in river management by mandating a balance between the development values of hydropower production and the environmental benefits of preserving fish and wildlife species as well as enhancing recreational opportunities at the time of relicensing.

Because the Federal Power Act is a very complicated document, the lay reader and the general public have difficulty understanding it. To make matters more difficult, the FERC has construed the various sections of it in their favor over the years. Both the courts and Congress have attempted to modify the FERC's behavior, but the FERC has typically held steadfast to status quo and narrowly construed new mandates or used other

sections of the FPA to maintain their hegemony in relicensing proceedings. Further, there are numerous areas of overlap in the FPA, which make it difficult to know which are the most important for gaining full comprehension. For the purposes of this thesis, a table summary is provided below to orient the reader to the most important sections of the FPA.

Table 1: Relevant Sections of the Federal Power Act

FPA Sections	Section 4 (e)	Section 10 (a)	Section 10 (j)	Section 18
Title and area of impact	Conditions for the Protection of a Federal Reservation, including Tribal Land.	Conditions for Protection, Mitigation, and Enhancement of Environmental Quality	Conditions for Protection, Mitigation, and Enhancement of Fish and Wildlife Resources (PM&E's)	Mandatory Fishway Prescription
Requirements	FERC license must be consistent with original purposes of reservation Fed agency managing the reservation may require conditions necessary for protection and use.	License must be best adapted to a comprehensive plan. Balances energy generation with all other beneficial uses.	Fed/State Agencies condition project to adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds)	FWS and NMFS may prescribe mandatory conditions for fish passage
Commonly accepted tenants	Pretty much mandatory upon the FERC to accept. If FERC believes condition exceeds scope of Section 4(e), it may issue license under protest and request judicial review.	Agencies or other participants such as tribes can submit comprehensive plans. FERC evaluates the plans against project revenues.	Agencies recommend, but FERC may reject a given condition if inconsistent with Part 1 of the FPA, and an alternative condition adopted by the FERC provides PM&E's	Pretty much mandatory upon the FERC to accept. Agencies can reserve right to adopt or amend prescription after license issued.
Who has the power?	Land management agencies because conditions are mandatory	Currently licensed operator because they tend to hold the cards on the development of the comprehensive plan. FERC because they may reject conditions.	FERC because it may reject recommendation of agencies. Often does this on the basis that conditions are inconsistent with comprehensive plans for development.	Fish and Wildlife agencies because conditions are mandatory. Administrative hearing provisions of 2005 Energy Policy Act may shift balance of power back to operator.

1994 Project Decommissioning at Relicensing Policy Statement

Nothing is perhaps more emblematic of how thoroughly the industrial era developmental pressure shaped public policy formation than the fact that the Federal Power Act (FPA) contained no mechanism to consider the issue of potential dam removal. The physical structures of dams were seen as emblems of our progress and an expansion of power. Yet, as previously demonstrated, the FPA was fashioned to consider limited license terms at the insistence of President Theodore Roosevelt. This was done primarily to serve the public interest in preventing monopoly control of our waterways. In other words, the licenses were limited and subject to changing conditions, but the physical structures themselves were seen as permanent features of the landscape.

All of this changed when the FERC issued a policy statement in 1994 in consideration of dam removal ("Project Decommissioning at Relicensing: Policy Statement," 1995). Prior to the issuance of this agency determination, there were only five possible outcomes the FERC could consider upon expiration of the original hydroelectric license:

- (1) the United States can take over the project [this has never happened];
- (2) the Commission can issue a new license to the incumbent licensee;
- (3) the Commission can issue a new license to a new licensee [this has never happened when the incumbent licensee itself applies for a new license];
- (4) the Commission can issue a non-power license, which is a temporary license under which generating facilities are removed and project lands and non-power facilities are transferred to appropriate Federal, State, or municipal authorities [this has never happened];
- (5) the Commission can accept surrender of the license, which licensees only rarely do. (Sensiba, 1999, 618)

It is thus quite clear that out of five potential outcomes, most have never occurred, and another rarely occurs. The process obviously has shown very strong favoritism toward the business interests of incumbent licensees and an even greater predilection to status quo.

The 1994 policy statement adds two additional possible options available to the FERC upon making a relicensing decision. Specifically, the two new conditions are: “(1) authority under the Federal Power Act to deny a new license for a hydroelectric dam, and (2) impose environmental conditions on a new license that may render a project unprofitable, when doing so is in the public interest” (Bryant, 1999, 95). To date, FERC has exercised its authority under the Policy Statement on one occasion for each of the new possible outcomes.

An example of the first condition occurred in a watershed case in 1997. The FERC used its authority to require the removal of Edwards Dam on the Kennebec River in Maine against the operator’s desires (Bowman, 2002). The FERC chose to take this action because of its negative environmental impacts that could not be mitigated against. Specifically, the “FERC based its conclusions on several factors, including the significance of the Kennebec’s fishery resources, support from the State of Maine for dam removal, project economics, and the availability of alternative power sources” (Costenbader, 1998, 641). It should also be noted that other factors were key to the decision. The Edwards Dam was situated quite close to the mouth of the Kennebec River in the inter-tidal zone. As such, it blocked nearly all fish passage and, if removed, would have opened up many miles of potential upstream critical habitat.

The Cushman Project relicensing on the North Fork Skokomish River in Washington is an example of the use of the second condition. The FERC imposed license conditions that would have caused the operator (City of Tacoma Power) to lose \$2.5 million in the first year due to foregone power production related to mandated instream flow requirements (Bryant, 1999, 114). Each case has left the hydroelectric industry reeling. As noted earlier, the industry perspective is that the 1994 Policy Statement has afforded the FERC powers authorizing a federal “taking” (Stavros, 2000). Steve Klein, head of Tacoma Power, claims Congress created the FPA to induce private hydropower operators to develop projects. Such an inducement creates a contract with the government implying operators should be granted relicense conditions on reasonable terms. Specifically, he states: “A license that bankrupts you is not reasonable terms...if they said it was better to release flows for fish, the federal government ought to take the project over, compensate us for taking the asset, and operate it as a flood control project” (Stavros, 2000).

Beth C. Bryant has examined the implications of the 1994 Policy Statement. She finds that in the Cushman Project, the FERC had been granting annual renewals to the existing licensee for two decades (since the original license had expired in 1974). Because annual renewals only require the FERC to consider the project under the conditions for which it was originally licensed, it never brings to the fore new public desires for restoration of ecosystem integrity. In granting annual renewals over such a long period, Bryant finds that the FERC was undermining the original public trust intent

that President Roosevelt so vehemently called for in limiting original licenses to 50-year terms (1999).

As noted above, federal takeover under section 14 of the FPA is one of the options the FERC has upon relicensing, though this has never been exercised. The original intent of this provision to the FPA was to give the federal government sufficient power to prevent a monopoly. Bryant finds the only reason the federal government would exercise this authority today would be to “foist the costs of decommissioning onto the taxpayers” (1999, 117). She states this because Section 14 pre-supposes that the continued operation of the project would still be in the public interest. However, the historical precepts that created Section 14 of the FPA simply never considered a situation in which the currently licensed operator would desire to back out of a project due to unfavorable economics.

This issue has not been decided by the courts, and there is much room to dispute whether the Commission possesses the authority to decommission a licensed project (Bryant, 1999, 112). The Edwards Dam case would have presented an opportunity to test the Policy Statement in the courts; however, this never occurred, because the State of Maine took over ownership of the project in a negotiated settlement. Ultimately, the cost of dam removal and fish restoration activities were borne by upstream hydroelectric operators and a Defense Department shipyard in exchange for favorable terms in each of their cases (Lowry, 2003, 79).

Karen Costenbader has argued for a national decommissioning fund, which was previously contemplated by the FERC. She finds that even though the Policy Statement

has not been tested in the courts, the FERC's construction of the FPA will not be infringed upon by the courts so long as they continue to act in the public interest (1998). However, the real test of whether the FERC's authority to order decommissioning will most likely be fought in the area of regulatory takings law. Costenbader argues that the industry perspective is flawed because the FERC in ordering decommissioning is only reasserting a right that the federal government always retained. Specifically, "anyone who builds a structure in a navigable waterway does so at his own peril because the government's power to regulate navigation confers upon the United States a dominant servitude which extends to the entire stream and the stream bed below the ordinary high-water mark" (1998, 662). Essentially, navigation trumps private property rights! This is unlike the case for federal takeover of the project. That would imply there is still a public interest vested in the value of power production.

The likelihood of FERC ordering decommissioning in the future will become more prevalent. Several factors have come together to make this potential more real. First, dams are no longer seen as environmentally benign sources of power. The ECPA inaugurated in an era during which the public interest of environmental restoration may trump development. Second, a deregulated energy market makes hydropower industry profits less certain relative to other sources of power. Finally, the federal and state agencies with mandatory conditioning authority may be more likely to recommend protection, mitigation, and enhancement measures that decrease profitability. For these reasons, Costenbader asserts that the FERC should order the hydropower industry to accept a national dam decommissioning fund to protect the public interest and ensure

operators will not simply walk away from unprofitable ventures and leave the physical structures in place. The fund could be enacted through a risk-pool type mechanism thus saving any one operator from bearing too high of burden. In doing so, the fund substantially protects the public interest in FERC relicensing proceedings (1998). It would also prevent what Bryant calls “foisting the cost of decommissioning onto the taxpayer” (1999, 116).

Transition from Traditional Licensing Process to an Integrated Licensing Process

In 1997, the Commission codified the Alternative Licensing Process as a means to speed up relicensing by harmonizing the NEPA Environmental Impact Statement requirements with the FERC pre-filing scoping processes. This kind of process reform should be looked at as part of an ongoing desire within the FERC to retain its own authority and thereby decide cases more expeditiously. In evaluating the FERC’s response to NEPA mandates beginning in the early 1970’s, David Spence states: “facing a growing caseload, the agency sought to avoid cumbersome environmental review procedures as a way of maximizing its productivity” (1999, 434). Specifically, Spence found that the FERC initially complied with the intent of the NEPA by drafting full Environmental Impact Statements (EIS) for most licenses, but quickly shifted to using the less strenuous Environmental Assessment (EA) protocol. He finds that this trend has been controversial in the environmental community as the EA procedure is less transparent and limits the public’s ability to challenge non-significant findings or so-called “FONSI’s” (1999).

These types of relicensing process reforms are generally termed “front-loaded” approaches owing to the greater coordination required by stakeholders earlier on in the process (Robinson, 2000, 16; Swiger & Grant, 2004, 25). A reduction in the time required for arriving at relicensing decisions is a major goal of the FERC. As noted in its own Fiscal Year 2006 budget request to Congress, they state, “While we expect license applications to take approximately 17 months to process using the ILP, there are opportunities to reduce this time” (Commission, 2005, 17).

The logic behind the FERC’s desire to speed up the timeline should be evaluated from two very different standpoints. The first comes from simple bureaucratic efficiency measures. The FERC can justify its own centrality for maintaining a near-monopoly in hydro licensing through ensuring on-time-delivery of services to the public. This is a fairly typical measure for many federal agencies and is usually quite easy to track. In fact, the FERC “is developing an effectiveness study to determine the extent the ILP reduces processing time and costs while maintaining environmental consideration” (2005a, 17). Lowry characterized this drive for governmental efficiency both as a “broad force affecting American public policy today...(and), the overriding principle of much public policy at the end of the twentieth century” (2003, 60). The second reason relates to the continued viability of hydropower when compared to other sources of electricity generation. As previously mentioned, the deregulation of the electric industry has made other sources of power more attractive to private operators. The initial capital outlay for building new power plants has been declining, while the costs for hydropower have been rising due to the changing nature of relicensing owing to mandatory conditions imposed

by the federal agencies (Sensiba, 1999). Much of the blame for this perceived loss of bureaucratic efficiency has been aimed directly at the ECPA amendments in requiring agencies to increasingly share authority.

What is important in the foregoing analysis of bureaucratic efficiency and the desire for a speedier timeline in the relicensing process? It comes down to a trade-off in evaluating what most properly lies in the public interest. In the simplest sense, speedier resolution of cases should, in theory, result in cheaper power for society at large. It could be argued that cheaper production of power is in the public interest because it keeps the economic engine of the country rolling. What this particular viewpoint does not consider, however, is the public interests of the communities most directly affected by relicensing decisions. Namely, those communities that are bounded within the confines of the watershed. Hydroelectric relicensing is only one part (albeit a very large part) of a broader desire for ecosystem and watershed restoration efforts. These efforts require nothing less than the total commitment from all communities within a watershed to create collaborative and long-term solutions. A speedier resolution of the relicensing part of the equation may benefit the FERC and the hydroelectric operator, but it will still leave the communities locked into adversarial relationships. Finding the commitment to create collaborative approaches takes time for communities with differing values to create trusting relationships. In its own attempt to forge ahead with the Integrated Licensing Process, the FERC may pat itself on the back for extracting greater efficiencies in the process, but in doing so, it may inadvertently leave fractured watershed communities lying in its wake.

2003 Policy Statement on Consultation with Tribes

In response to several Executive Orders, the FERC issued order number 635 on July 23, 2003, which is formally titled Policy Statement on Consultation with Indian Tribes in Commission proceedings. The FERC considers the order one of their “landmark decisions” that will have the greatest impact on the industries they regulate (Federal Energy Regulatory Commission, 2006). In it, the FERC acknowledges the unique relationship existing between the federal government and the tribes as defined by treaties, statutes, and judicial decisions. In the policy statement, the FERC specifically acknowledges its trust responsibility and requirement to interact with the tribes on a government-to-government basis ("Policy Statement on Consultation with Indian tribes in Commission proceedings," 2003). However, the FERC also qualifies these responsibilities by pointing out that it is an independent regulatory agency that functions as a quasi-judicial body. As such, it has certain restraints placed upon it when communicating and consulting with parties in a contested case that place limitations on its ability to live up to the spirit and scope of the Executive Orders. At the same time the FERC issued the new policy statement, it also announced the establishment of a Tribal Liaison position and some new rules and policies on the hydroelectric relicensing process. As part of the new rules, the FERC stated that it:

...will consider any comprehensive plans prepared by Indian tribes or inter-tribal organizations for improving, developing, or conserving a waterway or waterways affected by a proposed project. The Commission will treat as a comprehensive plan, a plan that: (1) Is a comprehensive study of one or more of the beneficial uses of a waterway or waterways; (2) Includes a description of the standards applied, the data relied upon,

and the methodology used in preparing the plan; and (3) is filed with the Secretary of the Commission. ("Policy Statement on Consultation with Indian tribes in Commission proceedings," 2003)

As noted previously in this chapter, one of the historically contested issues in hydropower regulation has been over a comprehensive planning mandate. In this policy statement, the FERC acknowledges that it will accept tribal comprehensive plans meeting its criteria. However, it does not make clear that such plans will be accepted on equal footing with those submitted by the other state and federal agencies with mandatory conditioning authority, or even the currently licensed operator. The FERC states that it will "consider" the plans submitted by the tribes. This point will be more thoroughly examined in the Chapter Four.

As a general note, according to Royster and Blumm, the EPA was the first federal agency to develop an Indian policy, which it did in 1984 (2002, 220). The EPA's policy statement also recognizes a requirement to treat tribes on a government-to-government basis. However, unlike the FERC, the EPA qualifies this responsibility, utilizing significantly different terminology. It states,

The Agency stands ready to work directly with Indian Tribal Governments on a one-to-one basis rather than as subdivisions of other governments...[the EPA] recognizes Tribal Governments as sovereign entities with primary authority and responsibility for the reservation populace.(Royster & Blumm, 2002, 220)

The EPA's tribal policy further notes how the tribes should take a "lead role" in matters affecting their environment. The EPA's role is to "take affirmative steps to encourage and assist Tribes" in assuming their own management. Part of this assistance should

include aid funds through grants to allow the tribes to assume a role on par with the states (Royster & Blumm, 2002). Instead of creating a Tribal Liaison Representative, the EPA created an entire office dedicated to coordinating their tribal affairs. The office “places a special emphasis on building Tribal Capacity to administer their own environmental programs” (Environmental Protection Administration, 2006). By contrast, the duties and responsibilities of the FERC’s Tribal Liaison outlined in the policy statement read more like an ombudsman role.

In evaluating the languages and content of both the FERC and EPA policy statements on relations with the Tribes, it is notable that the key difference seems to be the FERC’s use of the terminology concerning its obligation to uphold the Tribal trust responsibility. However, the FERC never clearly delineates what the exact nature of that trust responsibility is except to say, “...this historic relationship requires it to adhere to certain fiduciary standards in its dealing with Indian tribes” (“Policy Statement on Consultation with Indian tribes in Commission proceedings,” 2003). The EPA’s policy statement makes no such mention of a trust responsibility. The FERC seems to fall short of creating an express obligation to treat the Tribes as fully sovereign nations. Instead, the FERC notes how it must maintain its independence and neutrality owing to its nature as a quasi-judicial body.

The stance the EPA takes is one of building tribal capacity, while the FERC in retaining the language of tribal trust relationships shows a desire to keep the tribes in a dependency status. The FERC does go on to offer palliatives such creating a Tribal Liaison Representative staff position. Taken together with the FERC’s newly

implemented and streamlined Integrated Licensing Procedures, it would seem that the liaison exists to smooth ruffled feathers early in the process and avoid a litigious situation later on. The FERC states, “early consultation has begun for over 43 relicensing cases due to be filed over the next three years, ensuring tribes understand and become fully engaged in the licensing process. Because the effectiveness of the licensing process increases the earlier stakeholders are engaged in the process” (Commission, 2005, 18). Understanding a process and “becoming fully engaged” are ill-defined terms and somewhat shorter in stature in comparison with the stronger language the EPA adopts referring to the tribes as sovereign nations.

In *Escondido v. LaJolla* (1984), Justice White speaking for a unanimous Supreme Court, held that the FERC must accept the Secretary of Interior’s mandatory Section 4(e) recommendations to protect tribal reservation lands. However, the FERC did not have to seek the Band’s permission in drafting its license order (“*Escondido v. La Jolla*,” 1984). This was an interesting decision because it clearly shows that it is the Secretary of Interior’s role to uphold the tribal interest in relicensing proceedings, not the Tribal governments’ themselves. On the face of it, this would seem to run counter to the FERC’s policy statement affirming that it will accept tribal comprehensive plans. However, from a historical and comprehensive planning perspective the actual decision in the *Escondido* decision is not nearly as interesting as one of the footnotes to the case.

This footnote squarely considers the issue of tribal sovereignty in FERC proceedings. It states:

...The Act gives every indication that, within its comprehensive plan, Congress intended to include lands owned or occupied by any person or persons, including Indians...It is equally clear that, when enacting the FPA, Congress did not intend to give Indians some sort of special authority to prevent the Commission from exercising the licensing authority it was receiving from Congress. Indeed, Congress squarely considered and rejected such a proposal. During the course of the debate [in 1920] concerning the legislation, the Senate amended the bill to require tribal consent for some projects. Section 4(e) of the Senate version of the bill provided that "in respect to tribal lands embraced within Indian reservations, which said lands were ceded to Indians by the United States by treaty, no license shall be issued except by and with the consent of the council of the tribe."...However, that amendment was stricken from the bill by the Conference, the conferees stating that they "saw no reason why waterpower use should be singled out from all other uses of Indian reservation land for special action of the council of the tribe. ("Escondido v. La Jolla," 1984, 787)

That the Senate ultimately chose not to draft the FPA in a fashion that would allow Tribal autonomy falls in line with the historical presentation outlined in this chapter. The FPA was created during the interwar years when the nation was focused on economic expansion and hence a need for unfettered access to all available sources of hydroelectric power. Granting the Tribes special authority over the Federal Power Commission would have been seen as obstructionist. However, it is interesting to consider how different the FERC relicensing process might look today if the amended Senate version requiring Tribal consent had passed. Certainly, the FERC would not be in a position of "considering" Tribal comprehensive plans as but one among many. Certainly, the Tribes would not be in a dependent position of having to rely upon the Secretary of Interior to

protect their trust interests by invoking Section 4(e) of the FPA. Instead, the Tribes would be in a much greater position to argue for and implement their own conceptions of holistic ecosystem management and environmental restoration. As it stands now, the Tribes are subject to status quo arrangements favorable to the industrial development perspective and Western worldview with its focus on dividing riverine basins into discrete segments rather than treating them as whole ecosystems.

Summary

This chapter has utilized a historical presentation to formulate a literature review on the FERC and the Federal Power Act. A historical presentation was chosen to familiarize the reader with a somewhat obscure federal agency of which the general public has little understanding, but which nevertheless has the power through its relicensing process to shape the environment for decades to come. Through various eras, the United States has witnessed a broad transition from mostly military control and management of our nation's waterways to a modern era in which numerous agencies have a part to play in determining the general public interest in both developing and preserving riverine environments.

In the developmental era, navigation was synonymous with commerce. Therefore, the prevailing policy interest was on preventing obstructions to navigation. However, as technology improved to make hydropower the nation's chief instrument leading to economic expansion, the prevailing policy interest shifted to utilizing private capital investment for development of the waterways. This called for an extremely strong

centralized licensing authority to overcome jurisdictional boundary conflicts and ensure a stable climate for industry.

Although the Federal Power Act grants the FERC relatively pervasive licensing authority, it is not perpetual. The Progressive Era placed constraints upon monopoly control through the mechanism of relicensing. The Environmental Era has validated this course of action as the public interest re-evaluation of our environment has shown how dams have had a tremendous impact on ecosystems and the communities that depend upon ecosystem integrity for economic independence. Numerous judicial and legislative mandates have attempted to shift the balance of power in relicensing decisions away from the developmental status quo. Chief among these mandates was the ECPA, which raised the status of the fish and wildlife agencies in hydro relicensing, thereby ushering in the modern era of a shared bureaucratic authority in determining the best course of action for future management of our nation's waterways. This distribution of authority has come with trade-offs however. It has been blamed for unnecessary delay in arriving at relicensing decisions. The FERC recognizes it faces an uphill battle, as the bulk of America's dams will come up for relicensing in the next two decades. Nowhere is this truer than in the Western United States where endangered species concerns are likely to bring relicensing decisions to the level of political deadlock. The FERC has attempted to resolve some of the sources of delay by implementing a new Integrated Licensing Process requiring much greater collaboration among the stakeholders early in the process.

Finally, this chapter has evaluated two other issues of concern in hydroelectric relicensing. First, what happens when the trade-off between the needs of the

environment trump the continued economic viability of the FERC license? The FERC has attempted to resolve this issue by implementing a policy for project decommissioning. So far, it has been tested in two cases, but has yet to be finally decided in the courts. Second, what is the proper course of action when the FERC must confront tribal entities and their special concerns in relicensing? The FERC has issued a policy statement on how they intend to interact with the tribes, but it is unknown how this will impact the FERC's future ability to craft comprehensive plans for waterways development in Indian Country.

The next chapter will move away from the general historical overview of the FPA and the FERC and will instead focus in on a specific relicensing case. This Klamath River hydroelectric relicensing case is likely to be complex enough to challenge not only the FERC to its limits, but all other stakeholders involved in arriving at a new 30-50 year license.

CHAPTER THREE

CASE STUDY: KLAMATH RIVER HYDROELECTRIC RELICENSING PROJECT

Introduction

The Klamath-Siskiyou bioregion is an amazingly diverse gem within North America and the world. The World Wildlife Fund has listed it among the top 200 critically important regions in the world for special scientific study and preservation for its incredible diversity both in animal and plant species. Specifically, it contains some of the highest concentrations of diverse coniferous forests in the world with over 40 species represented. Additionally, there are more than 235 mollusks and snails within the region, with 60% of these found nowhere else in the world (World Wildlife Fund, 2004, 4).

The Klamath River and its tributaries make up the largest watershed in the ecoregion. It, too, was once a gem with qualities that made it unique in North America. From its source high in the arid desert lands of Southern Oregon, the Klamath flows approximately 350 miles through temperate forest to its mouth at Requa in Northern California. The entire 12,000 square mile watershed includes the Trinity River as well. A map of the entire Klamath Basin is provided in Appendix A. It has frequently been described as an “upside down” watershed since the flat topography and prime agricultural growing region is closer to its source rather than the other way around. The Klamath River supported numerous Native American tribes (Klamath, Shasta, Hupa, Karuk, and

Yurok) since time immemorial, and once was the third largest salmon producing river in North America (McCarthy, 2001). Beginning early in the last century however, the river and its tributaries began to be put to work in supporting the economic development of the nation as a whole. Numerous threats to the river have accrued owing to logging, mining, road building, irrigation for industrial style farming, and hydroelectric dam building and operation (King, 2004). The environmental non-profit American Rivers produces an annual report of the nation's top threatened or endangered rivers. It bases this report on several factors including the nature and magnitude of the threat, the scope of decision points affecting the river in the upcoming year, and the regional or national significance of the river. Since 1987, the Klamath River has consistently been listed in the top-ten, owing to seriously declining salmon runs, poor water quality, farm irrigation, and threats associated with a complex of hydroelectric dams (American Rivers, 2005).

In 2004, the hydroelectric dams of the mainstem Klamath River came up for relicensing with the FERC. Numerous stakeholders and communities within the basin and beyond hope the relicensing will offer a unique and unparalleled opportunity to begin a process of ecosystem and salmonid species restoration. Other stakeholders and communities wish to retain access to relatively inexpensive irrigation water and hydroelectric power. Given the FERC's mandate to balance the needs of hydroelectric power generation with those of environmental preservation and recreation under the Electrical Consumer's Protection Act, it will have to hear the competing and often adversarial voices within Klamath Basin in arriving at its decision.

In this chapter, I will show that there has been, and continues to exist, a highly polarized and adversarial relationship between the several communities sharing the ecosystem resources available in the Klamath Basin. Such polarization is not conducive to broader ecosystem restoration goals desired within the basin. The unfavorable climate that has built up in the relationships between the basin communities is not likely to be reduced within the narrow confines of the FERC relicensing context. Settlement negotiations may offer an alternative way to create a solution that is acceptable to a majority of relicensing participants. Several broader basin stakeholder groups are working within the watershed to begin the process of reconciliation and creation of a more democratic process, possibly offering a greater hope for positive outcomes. Finally, the federal government cannot escape its tribal trust obligations regardless of the type of policy instrument ultimately utilized to avoid the adversarial morass.

Theoretical Model for Predicting Restoration Outcomes: What is Possible?

Given that the environmental conditions in the Klamath Basin have deteriorated over time, and that numerous voices from within the watershed communities and beyond are calling for restoration of the ecosystem, how can one predict the likelihood that such restoration goals will actually be achieved? One theoretical model proposed by William Lowry seeks to explain the variability in policy changes accounting for why some rivers are more likely to be restored than others. In creating his framework for explaining policy outcomes, Lowry draws upon and synthesizes the literature from both advocacy

coalition and common-pool resource scholars. In the model, he outlines how most individual cases can fall into one of four archetypal potential policy outcomes. Out of these four outcomes, the Klamath Basin hydroelectric relicensing case offers a quintessential example of Lowry's theoretical framework model where only disjointed changes are likely to occur.

According to Lowry (2003, 10), "the type of policy change occurring on different river restoration cases around the country is determined largely by the interaction of political receptivity to change and the physical complexity of the changes to be made." In addition to receptivity and complexity, Lowry also finds four broad external factors affect momentum for policy shifts:

- 1) Socioeconomic conditions supportive of alternations to the status quo,
- 2) Broad public opinion suggesting a receptivity to change,
- 3) At least some formal receptivity to change by governing coalitions, and
- 4) Encouragement of change from related issue areas. (2003, 10)

According to his model, political receptivity is likely to be high when the venue for decision-making is tolerant of change, the costs of maintaining status quo are high and readily apparent by a majority of coalitions involved, and the scientific information on potential benefits of change is widely embraced (2003). The two later conditions should be fairly straightforward to the reader, but the issue of decision-making venue needs further clarification.

Sometimes a decision can be so simple and non-confrontational that the appropriate venue remains at the local level (e.g., community meetings or similar forums). This decision-making venue could be more tolerant of change. Members of a

small local community are more likely to know one another personally, have frequent contact, or even have relied upon each other to share equipment or workloads. This greater level of frequent and intimate contact among community participants may allow them to feel more comfortable engaging in open and democratic discussion over the issues affecting their shared use of resources. Daniel Kemmis has made some keen observations on the dynamic of holding small community meetings versus the need for a more procedurally intensive venue for decision-making. He states, “It is the issue of responsibility that sets this kind of collaborative approach off from the normal public hearing. Once the parties realize they cannot turn over their problems to a third party to craft a solution, they have to come to terms with their neighbors and find their own creative solutions”(1990, 113). On the other hand, if a case involves long-held conflicts of interest or heavily value-laden confrontation between communities or jurisdictions, then the venue for decision-making may need to be bumped up to a higher level. In doing so, the increased formality and structured rules may create a more appropriate venue, but it may also bring it to the level of political quagmire.

Low physical complexity is characterized by the scale of the resource, involvement of a limited political jurisdiction, and one-dimensional rather than multidimensional alterations (Lowry, 2003). An example of a one-dimensional alteration might be a straightforward restoration aim such as removal of a small water diversion weir to allow resident species fish passage. On the other hand, multidimensional alterations might encompass the more highly complex case involving multiple dams,

multiple tributaries, and desired restoration of multiple anadromous species. A diagrammatic example of his model is shown in the table below.

Table 2: Lowry's Theoretical Model

Political receptivity to Change Low \leftrightarrow High	I. Fundamental Changes	II. Experiential Changes
	III. Secondary Changes	IV. Disjointed Changes
	Low \leftrightarrow High Physical Complexity of Changes	

Source: (Lowry, 2003)

Based on Lowry's model, one would predict that fundamental changes are likely to occur in a case where high political receptivity to change exists and the system has low physical complexity. Lowry uses the case of the Neuse River in North Carolina as an example where such fundamental changes occurred. In this case, the entire river and its tributaries were wholly contained in one state's political jurisdiction, and only one dam had to be removed to provide a substantial opportunity for restoration goals. The dam was removed at relatively low cost, and aquatic species recovery has already been notable.

At the opposite end of the spectrum, where there is low political receptivity and high physical complexity, one should expect that only disjointed changes are likely to

occur. An example, Lowry at the Snake River in the Pacific Northwest. In this case, the proposed restoration measures of removal or breaching four dams is highly complex and few of the advocacy coalitions have arrived at a consensus on the scientific evidence that such an action would actually achieve the desired aim of restoring salmonid species. Because it is impossible to divorce the Snake River hydroelectric system from the broader political jurisdiction of the Columbia Basin, achieving any sense of political receptivity to change is also an enormously complex hurdle. Multiple threatened or endangered fish species that are listed on the ESA hang in the balance and recovery has been minimal to non-existent even though millions of dollars have been spent. Lowry summarizes the disjointed outcome by stating, “restoration activities, however, remain largely disaggregated uncoordinated, and ineffective” (2003, 218). One likely disjointed outcome of such political deadlock has been and likely will continue to be bringing the case to the courtrooms. Even this option has not brought substantial improvement to the policy process or positive outcomes for salmonid restoration. There is no reason to believe that the courts can provide any better alternative to the political deadlock on the Klamath River.

In the current administration, under President George W. Bush, there is generally a very low political receptivity to change. The administration tends to favor pro-development or business interests over those of environmental preservation. Lowry summed up the changes in environmental policy that occurred after the transition from the Clinton to the Bush administration. “As a result of the administration’s actions, the evolution in natural resource policies toward participatory, collaborative, science-based

approaches was replaced with a reinstatement of traditional goals of use and extraction” (2006, 323). To be more specific with respect to hydroelectric relicensing policy, one key indication of this direction came in the 2005 Energy Bill signed by President Bush on August 8, 2005. Contained within the Energy Bill was a change in the rules on relicensing which gave a heavy advantage to the utility company interests in any relicensing case by allowing them a re-hearing before the Interior Department on license conditions set by agencies such as NOAA Fisheries, Fish & Wildlife Service, and the Forest Service. One commenter on the new rule states that it “will be a disincentive for utilities to continue settlement negotiations such as those taking place now among four Indian tribes, government agencies and conservation groups and PacifiCorp, over its license renewal on the Klamath River” (Miller, 2005).

At issue is whether the new rule will cause a break down in both the traditional process and the potential for settlement. For the traditional process, will the agencies back down on placing tougher conditions on a relicensing if they know the utility company will be granted an evidentiary re-hearing at the end of the process? More specifically, will the local/regional field offices be less aggressive in defending tough or controversial environmental positions if they perceive that their presidential appointed agency heads will fail to support them? Concerning the settlement option, will utility companies leave the bargaining table if they perceive they can successfully challenge at a re-hearing any conditions placed upon the operating license? On the other hand, the utility companies claim the new rule will speed the process up by avoiding protracted legal battles after a license has been issued by the FERC. When coupled with a very

complex ecosystem, multiple dams involved in the Klamath relicensing case, numerous factors affecting the potential for restoration, and competing political and agency jurisdictional lines within the basin, it is unlikely that there will be very dramatic changes to the status quo offered in a FERC decision on the Klamath case.

Many stakeholders in the Klamath Basin and beyond would like to see restored ecosystem services. Restoration has been defined as, “the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed” (Society for Ecological Restoration, 2002, 2). This does not of course mean that the ecosystem will be returned to its natural, pristine, or pre-Western civilization contact conditions. It merely means that general trajectory is established based upon historical conditions. Additionally, much foresight and pre-planning must go into any plans for dam removal and river restoration. Former Secretary of Interior Bruce Babbitt has warned against accepting an attitude that society should proceed upon a course of dam removal because it has an intuitively good feeling associated with it. He specifically challenges the pro-removal lobby to avoid the temptation to say, “Trust us-removal is the answer” (2002, 657). Instead, he suggests that society utilize more rigorous evaluation criteria and scientific principles than were ever considered during the heyday of dam construction. Other groups arguing for river restoration agree with Mr. Babbitt and find that consensus-based approaches are key to creating desirable outcomes.

Restoration represents an indefinitely long-term commitment of land and resources, and a proposal to restore an ecosystem requires thoughtful deliberation. Collective decisions are more likely to be honored and implemented than are those that are made unilaterally...it behooves all

stakeholders to arrive at the decision to initiate a restoration project by consensus. (Society for Ecological Restoration, 2002, 1)

The types of ecosystem restoration goals for the Klamath Basin include recovering declining wild salmonid species, improving the conditions of the national wildlife refuges in the Upper Basin, enhancing fire management and upslope forestry conditions in line with traditional tribal cultural practices, and returning the river to a more normalized seasonal hydrographic cycle to include species connectivity and downstream sediment deposition.

The above statement by the Society for Ecological Restoration makes it clear that collective decision-making and consensus building among the several communities and stakeholders involved in the process are necessary pre-conditions before undertaking restoration projects. This would be especially true given the high physical complexity and scale of proposed restoration goals in the Klamath Basin. The traditional FERC relicensing process, given its narrow procedural confines, will not be a sufficient policy instrument to achieve restoration objectives. This stands to reason, since the Federal Power Act was created during an era when the chief objective was development of water resources to the fullest extent possible. Indeed, if dam removal is taken as a necessary condition for restoration of ecosystem services, then the FERC relicensing process is problematic. Beth Bryant finds that the FPA does not even consider the option of dam decommissioning. She states, “no serious consideration was given to the possibility that a free-flowing river might someday become more valuable than the hydropower a dam produced” (1999, 106).

The FERC does not operate upon the basis of consensus. On the contrary, the FERC relicensing process is notoriously adversarial in nature. The FERC considers itself an independent quasi-judicial body claiming simple adjudication of each case based upon the merits of the information brought before them in the proceeding. As stated in Chapter Two, this characterization of the FERC as a quasi-judicial body only affords them an opportunity to “call balls and strikes” in each proceeding (Echeverria et al., 1989). They claim that this requirement to maintain their detached sense of independence as a political body stems from their ability to regulate power trading (Pinney, 2003, 366).

The nexus between the need for consensus building to achieve restoration goals, the adversarial nature of the FERC relicensing process, and Lowry’s theoretical model - which predicts disjointed outcomes - means that the FERC relicensing should not be looked at as a final solution for the problems of the Klamath Basin. Instead, the FERC relicensing should be looked as but one part (albeit a huge part) of a complex set of factors that must be considered in order to achieve the broader desired goals within the basin. This viewpoint is supported readily throughout the literature both generally and specifically in the Klamath case. Both a general and specific example representative of the literature are shown below:

Relicensing alone cannot ensure basin-wide recovery of endangered species, but ignoring the unique opportunity that relicensing presents for entering new environmental values not present upon original authorization of projects would be negligent. FERC relicensing will be indispensable to restoration efforts. (Blumm, 2002, 234)

Nothing the FERC causes PacifiCorp to do will be a cure-all for the Klamath River’s problems. (King, 2004, 53)

The FERC can adjudicate a particular case, but they cannot restore torn communities. At its best, the FERC relicensing process can take in the numerous competing voices within a watershed basin and create (along with the agencies having mandatory conditioning authority) a comprehensive plan for management. It can do this within the narrowly confined borders of the defined project area. However, if the broader objective is restoration of ecosystem services, then the FERC cannot possibly satisfy all sides or communities. For instance, if Lowry's hypothesis is correct, one might reasonably expect that perhaps one dam (presumably Iron Gate because it is the lowest dam on the river) will be targeted for removal. Of course, this will open up a significant stretch of river for restoration activities and new salmon habitat, but it will not lead to basin-wide recovery of an endangered species or full ecosystem restoration. This type of disjointed outcome would demonstrate that support does exist for ecosystem restoration, but not at the expense of all the hydroelectric generating capacity available throughout the basin. In effect, such a decision by the FERC would support the hypothesis that FERC is substantially a status quo agency, while at the same time support the mandate of the Electrical Consumer's Protection Act by creating a balance between the needs of hydropower and the environment.

Short Historical Overview of Klamath Basin Controversy

The chief geographical division of the Klamath River is between the upper basin and the lower basins. This geographical division has also led to a de facto political division. The controversy in the entire watershed has historically been cast by the press as a war between farmers and their irrigation needs in the upper basin and the tribes and other fisher-people and their need for adequate high quality water to sustain populations of salmonid species in the lower basin. Of course, the actual problems the FERC is likely to face in adjudicating the Klamath relicensing case are far more complex than a simple decision between farms and fish. One author stated, “At any given time in the Klamath River Basin, as many as thirty different federal, state, local, and tribal agencies may be operating in complete conflict with each other. Any possible solution to this fight will have to consider the legitimate interests of farmers, environmental advocates, and Native Americans” (Davidson, 2004, 532).

However, the two strongly divergent uses for water within the basin offer a useful starting point for understanding how adversarial the relationships between the various users of Klamath waters and communities within and beyond the basin have become. While distilling the multiple and complex problems of the Klamath Basin into a more simplified characterization of “farms versus fish” leaves many questions on the margins, it helps to elucidate the clash of values between parties. Both communities feel equally threatened that their traditional ways of existence and culture are facing certain death if more is not done to reconcile their particular concerns.

Two recent significant events in the history of the Klamath Basin typify this adversarial relationship and the intensifying clash of values. They are the “Klamath Water Crisis of 2001” and the “Fish Kill of 2002.” Each horrendous event signifies to the communities involved the worst case in federal mismanagement of a precious resource. That both events occurred temporally and spatially within a single watershed basin is indicative of how tenuous the future regulatory climate for the Klamath is likely to be.

The seminal event for the Upper Basin farmers that polarized their position and intensified fears that their way of life was in jeopardy, if not extinction, was the water crisis of 2001. During this year, the Klamath Basin only experienced about half of its average rainfall. This shortfall brought to a head the various conflicting claims for scarce water that had to be shared between the Indian tribes, environmentalists, farmers, and federal wildlife managers. Additionally, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (now the National Oceanographic and Atmospheric Administration, NOAA Fisheries) decided that, under the Endangered Species Act (ESA), water must remain in the basin to preserve the endangered Lost River and Shortnose Suckerfish. Both fish species are important to the Upper Basin tribe’s culture and traditional subsistence needs. In response, the U.S. Bureau of Reclamation, the federal agency responsible for administering water contracts to the farmers within the Klamath Reclamation Project, warned farmers that they may not receive their full allocation of irrigation water. Summing up the degree to which tensions between the federal government and the farmers had risen, one source stated, “Civil war nearly

erupted!” (Meiners, 2003). Farmers staged a bucket brigade protest in Klamath Falls Oregon threatening to cut the locks and illegally open the floodgates to the irrigation canals. Meiners summarized: “Under intense pressure, the Bureau of Reclamation, nearly four months after its initial decision to withhold all water, agreed to release 70,000 acre-feet for irrigation purposes-about 22 percent of the annual average. It was too late to save agricultural production that season, however, and farmers lost an estimated \$157 million” (2003, 3).

The seminal event for the Lower Basin tribes and other fisher people was the fish kill of 2002. The fish kill on the Lower Klamath Basin in the fall of 2002 ultimately became one of the worst fish kills in the history of the Western United States. The Lower Basin Tribes and commercial fishermen witnessed the fish kill with serious alarm and felt it was representative of how far the ecosystem of the Klamath River had deteriorated. Just as the farmers in the Upper Basin viewed the events of the previous season as a threat to their continued existence, the tribes and fishermen saw the fish kill as a seminal event indicating a serious threat to their existence and traditional culture.

Prior to this tragedy, due to declining stocks of wild Coho Salmon and current runs that consisted mostly of hatchery fish, NOAA Fisheries, the agency responsible for management of anadromous fisheries, placed the wild Coho on the ESA in 1997 (Davidson, 2004, 541). Not wanting a repeat of the 2001 water crisis, the Bush administration created the Klamath River Basin Federal Working Group. This working group was set up to restore a balance between the competing demands on water usage between the endangered species and the farmers. The end result of the working group

findings culminated in the now famous ceremony in March of 2002 when Secretary of Interior Gale Norton opened the headgates to allow irrigation water to flow to the Klamath Reclamation Project farmers (Davidson, 2004, 547). Secretary Norton's actions caused considerable consternation on the part of the downstream tribes and the environmental community. A National Research Council report found that by the late fall of 2002, an estimated 33,000 adult salmon and trout out of an estimated run size of 130,000 fish were found dead in the lower Klamath River (2004, 9).¹ The fury over the fish kill caused California Representative Mike Thompson, whose district covers Humboldt County where the fish kill mainly occurred, to dump 500 pounds of dead and rotting fish on the doorstep of Secretary Norton's office. Initially there was considerable controversy over the cause of the fish kill, but it is now known to have been caused primarily due to low flows that increase water temperature and decrease available oxygen. Specifically, the "California Department of Fish and Game supports the view that the excessive diversion of Basin water to farmers was in fact the cause of death"(Davidson, 2004, 549; King, 2004, 48).²

The above analysis of two horrendous events shows that there exists within a single watershed basin, a complex system of conflicting agency values each bureaucracy with its own set of inflexible laws to justify its actions. It is against this backdrop that the Klamath River Basin now faces what will probably be the most significant federal agency

¹ The actual number of dead adult salmon varies among different sources. Some place the loss at 68,000 fish. Of course, neither number accounts for an unknowable loss of juvenile fish.

² As a further indication of the adversarial relationship existing between the Upper Basin farmers and the Lower Basin tribes, it is interesting to note how the fish kill is often cited by sources in the Upper Basin as a "fish die-off". Obviously, the later terminology connotes natural processes rather than assigning some sort of man-made causality as the source of harm.

action to be undertaken in the modern era. In 2004, the Klamath Hydroelectric Project, (FERC No. 2082) came up for relicensing.

Description of the Klamath Hydroelectric Project

The Klamath Hydroelectric Project (FERC No. 2082) straddles two states (Southern Oregon and Northern California) and includes four counties (Klamath, Siskiyou, Del Norte, and Humboldt). The Klamath River originates above Upper Klamath Lake in Oregon and flows into the Pacific Ocean at Klamath, California, 350 miles later. All of the dams and the five mainstem reservoirs occupy a 64 mile stretch of river between Link River and Iron Gate (National Research Council, 2004). The operator holding the current license from the FERC is PacifiCorp, which is based in Portland, Oregon, and is a subsidiary of Scottish Power (one of the largest marketers of hydroelectric power in the world). The project was originally built between 1908 and 1962, and consists of seven hydroelectric developments on the mainstem, one of which (Keno Dam) does not generate power. One additional development is on Fall Creek, which is a tributary of the Klamath. Overall, the project has a power generating capacity of 151 megawatts. In addition to the project, the BOR owns the Link River Dam, which regulates the level of Upper Klamath Lake and is the source of all waters for the PacifiCorp Hydroelectric Project. PacifiCorp operates the Link River Dam in conjunction with the BOR's objectives for irrigation in the Klamath Reclamation Project. Iron Gate Dam, occurring at river mile 190, or approximately 20 miles above the town of Yreka, California, is both the largest dam in the project, and the final dam on the river.

Consequently, it regulates the flow regime for the Lower Klamath Basin to its terminus at the sea (PacifiCorp, 2005a). Since it contains no fish ladder, Iron Gate also has the distinction of being the terminus for all upstream migration of adult salmonid species. A schematic of the project can be found in Appendix B.

The current FERC operating license for PacifiCorp's Klamath Hydroelectric Project was set to expire on March 1, 2006. Under the rules required by the Federal Power Act, PacifiCorp was required by the FERC to submit to it for review the Final License Application (FLA) not later than the end of February 2004. PacifiCorp chose to utilize the Traditional License Procedure (TLP) for this relicensing process with a modification for an early consultation phase to achieve consensus on the scientific standards to be utilized by the agencies and stakeholders involved. This is a key issue for restoration objectives, because, as Lowry hypothesizes, achieving scientific consensus can lead to political consensus by building a common ground and forming trusting relationships among the stakeholders (2003, 18).

As described in Chapter Two, a commonly cited reason for delay in achieving a final relicensing agreement from the FERC has been in obtaining Section 401 certification under the Clean Water Act from the States. For this project, PacifiCorp chose to take advantage of a recent FERC amended rule that allows the operator to extend the timeline in applying for Section 401 certification from the state agencies involved (Oregon Department of Environmental Quality and California State Water Resources Control Board). Rather than having to submit water quality information at the same time they submit their application for relicensing, the new FERC rule affords the

operator up to two additional years to generate the data and submit it at the same time the FERC issues public notice the project is ready for environmental analysis. This new FERC ruling probably originates out of a study conducted by the Hydropower Reform Coalition (HRC) in 2001. Their analysis pointed out how the terms of most original hydroelectric licenses under the Federal Power Act frustrate the states' ability to make informed decisions owing to a lack of sufficient water quality data. Without the data, the states cannot adequately set environmental conditions on the relicensing that consider changing conceptions of what is in the public interest. Stating their position on the issue, the HRC found,

Most original licenses do not contain license articles that require the licensee to monitor the effects of project operations. Therefore, many licensees have no associated data on water quality, fish populations, recreation use, or other relevant issues. Given the lack of existing data, and our evolving understanding of river ecosystems, new studies are often necessary to make well-informed and well-supported decisions. (2001, 9)

The FERC has determined that the Project as proposed will constitute a “major project” under the rules of the National Environmental Policy Act (NEPA), and consequently, it will be required to prepare a full Environmental Impact Statement (EIS) before a final relicensing order can be issued. The FERC issued Scoping Document No. 1 (SD1) on April 16, 2004, and Scoping Document No. 2 (SD2) on May 17, 2005. In addition to receiving written comments from interested parties for the scoping process, the FERC conducted scoping hearings between April and June 2004 in Klamath Falls and Ashland, OR, and Yreka, Redding, and Eureka, CA. The scoping process is one of the rare public forums that allows the FERC to hear all interested parties (as opposed to only

FERC recognized interveners and stakeholders) on issues, concerns, and opportunities associated with the project.³

As described in the introductions of both FERC scoping documents for the Klamath hydro relicensing, the purposes of scoping are to:

- Invite participation of federal, state, and local resource agencies; non-governmental organizations (NGO's); Native American tribes; and individuals to identify significant environmental issues related to the proposed action.
- Determine the depth of analysis and significance of issues to be addressed in the EIS.
- Identify how the project would or would not contribute to cumulative impacts in the project area and the Klamath River Basin.
- Identify reasonable alternatives to the project that we should evaluate.
- Eliminate from detailed study issues and resources that do not require detailed analysis during review of the project. (2005b, 1)

Out of the eight total major project developments on the Klamath River, PacifiCorp has proposed to the FERC to relicense five of them. This is known as the “applicant’s proposed action.” There are numerous actions PacifiCorp has proposed for this relicensing, which are too lengthy to summarize here, but are wholly contained within SD2. Some of the highlights include decommissioning both the East Side and West Side developments and carving the Keno Dam completely out of the project boundaries. In addition, they propose to make only minor modifications to the Iron Gate Dam to include an automated fish marking system at the hatchery and installing an oxygenation or reaeration system (Federal Energy Regulatory Commission, 2005b). This would presumably improve water quality below the final dam on the river.

³ Scoping is also important for the purposes of this research because it provides a readily available source of information (transcripts of community sessions) for analyzing the relative perspectives and desires in each of several and distinct Klamath Basin communities.

Under the rules of the Federal Power Act, the FERC creates what is known as the “staff’s alternative” option to the applicant’s proposed action. Perhaps quite telling of the times and ominous for those who would desire greater ecosystem restoration within the basin is the staff’s alternative in the Klamath case which asserts that, “To the extent that modifications would reduce the power production of the proposed project, we will evaluate costs and contributions to airborne pollution *and greenhouse gas emissions, considering a range of potential reasonable generating alternatives*” (Federal Energy Regulatory Commission, 2005b, 81).

The FERC’s treatment of airborne pollution and greenhouse gas emissions would both fall under what Lowry terms “broad external factors” affecting the likelihood for fundamental shifts in policy. It seems clear that the FERC’s consideration of airborne pollution is squarely aimed at the low-cost alternative of either coal-fired or natural gas power generation plants that would need to come online to make up for lost hydropower generation. It would thereby make relicensing a more probable outcome. Similarly, the consideration of greenhouse gas emissions as an external factor is clearly incongruous given the current administration’s steadfast refusal to sign on to the terms of the Kyoto Protocol. Even rapidly emerging conditions within the United States could add significant external pressure on the range of alternatives the FERC is likely to assess when considering a specific relicensing case. Take for instance the ongoing aftermath of hurricane Katrina this year. Public outcry over rapidly rising energy costs combined with the energy industry and the administration’s instrumental use of the “crisis” is being used to push through new legislation to ease environmental restrictions on new refinery

construction (Eilperin, 2005). Given this political climate, it is probably safe to assume the FERC will be keenly aware that the administration will not willingly give up an opportunity to preserve hydropower capacity no matter how small the contribution to the national grid.

In addition to the staff's alternative, the FPA offers three other options. First, the "no-action alternative" would essentially allow the operator to continue the project under the same terms of the original license with minimal or no new conditions being placed upon them. The FERC rejected the no-action alternative for this relicensing. However, the FERC utilizes the no-action alternative in establishing baseline environmental conditions for comparison with other alternatives. This is a contested issue in relicensing because it does not consider historical conditions as the baseline for setting environmental conditions. Blumm noted that the Ninth Circuit court was challenged to evaluate this policy in *American Rivers v. FERC*. The Ninth Circuit struck down the environmentalist position finding that it was not pragmatic to ask the FERC to re-create a 50-year old environmental baseline. Blumm summarized the effects of this decision by stating, "But if present-day conditions are the standard from which to measure a project's effects on the environment, it seems obvious that much less protection and restoration of fish and wildlife is likely to result from relicensing decisions" (2002, 244). This is an especially large insult to the tribes because they have the longest history of empirical observation of the environmental conditions existing within the basin. The ECPA mandates striking a balance between the public interest in hydropower generation versus environmental preservation. Choosing to utilize the no-action alternative as the baseline

environmental conditions is another example of how the FERC has narrowly construed new legislative mandates to continue its history of creating status quo decisions (Bender, 1997).⁴

As noted previously, restoration of the ecosystem and salmonid species recovery has been identified as a major goal within the basin. By its very definition, ecological restoration has to be based upon a general trajectory toward historical conditions. It makes no sense to restore an ecosystem to present day conditions. That would only amount to holding present ground. One recent study has described in detail the historical distribution of Anadromous Fishes in the Upper Klamath Basin prior to the construction of the hydroelectric project. The authors of the report state, “knowledge of the presence and the historical extent of the upstream distribution for anadromous species on the Klamath River is important for restoration planning and future management decision-making” (Hamilton et al., 2005, 11). They further find that the Departments of Commerce and Interior have specific responsibility to preserve and restore anadromous fish under numerous authorities including Section 18 of the FPA to prescribe mandatory fish passage. However, given that the FERC has refused to accept historical conditions as an environmental baseline, they can effectively dismiss findings and recommendations for recovery by other agencies and opt instead for status quo.

⁴ Bender generally finds that in choosing to utilize the “no-action” alternative as an environmental baseline, the FERC misinterprets NEPA regulations to examine the consequences of not undertaking a project or action at all. Further, such use of the “no-action” alternative was prejudicial to the Yakama Tribe because it did not consider the FERC trust responsibility to evaluate a best alternative to achieving cultural resource benefits.

Second, the FERC could recommend to Congress an alternative of federal government takeover of the project. The FERC is not considering this option because, “No federal agency has suggested that federal takeover would be appropriate and no federal agency has expressed an interest in operating the Klamath Hydroelectric Project” (Federal Energy Regulatory Commission, 2005b, 82).

Third, the FERC could issue a “non power license” to another party other than the current project operator. This option is not being sought for the Klamath Project as the FERC has neither received any proposals from another party to do so, nor does the FERC believe it is appropriate to forego the power generation the current project contributes. One final possible option available in all relicensing cases is that the FERC could accept a surrender of the operating license from the incumbent licensee. Obviously, since PacifiCorp has submitted its Final License Application to the FERC, this option is not on the table.

Chapter Two identified five possible outcomes of any FERC hydroelectric relicensing case. In the Klamath case, as is the case in almost all previous FERC relicensings, several of the possible outcomes have already been dismissed. Within the confines of the FERC traditional licensing process, this leaves the future of the Klamath Basin with only two major potential outcomes: the applicants proposed action as outlined in their FLA, and the staff’s alternate. The real issue will come down to what is placed on the table in terms of modified operating conditions that are required by the agencies with authority to do so. The perception that those agency conditions will be extraordinarily costly may force the operator into seeking negotiated settlement as a final

option. In fact, this process is already underway in a parallel track in the Klamath Basin and will be discussed in more detail later in this chapter.

Overview of Stakeholders and Their Relative Positions on the Relicensing

There are numerous stakeholders involved in the Klamath hydroelectric relicensing, and it would be impractical to adequately cover all their backgrounds and positions regarding the proposed federal action.⁵ Instead, I will cover a selected subset in order to illuminate some of the more contentious issues/and or, those areas that are germane to the public interest at large as well as those within the project-affected communities. The relevant stakeholders to be discussed in this thesis are: the federal and state agencies with mandatory conditioning authority under the Federal Power Act, the currently licensed operator PacifiCorp, the four federally recognized tribes (Klamath, Karuk, Hoopa, and Yurok), the advocacy coalition formed by the environmental non-profit organizations, and the Klamath Water Users Association. Additionally, because they represent a unique perspective on the proposed relicensing, I will also briefly describe the positions of the California State Energy Commission and the Pacific Coast Federation of Fishermen's Associations. A brief table summary of the stakeholders and their relative positions on the relicensing are provided below:

⁵ As an example, the FERC Scoping Document 2 lists 68 relevant comprehensive plans promulgated by no less than 24 separate federal/state agencies, commissions, departments, boards, or councils that must be considered in the Klamath relicensing.

Table 3: Summary of Key Klamath Relicensing Stakeholders

Klamath Relicensing Stakeholders	Who Are They	Relative Position and Key Statements	What They Stand to Gain/Lose
PacifiCorp	Incumbent Licensee	Favor status quo. Dam removal will further degrade downstream water quality. Contend that BOR Bi-op affords little operational control of water flows throughout project.	Long-term stable license in fully capitated project without major concessions to fish passage, instream flow, and water quality restrictions on operation under renewed license.
Klamath Water Users Association	Non-profit corporation representing the interests of Upper Basin Farmers, Ranchers, Irrigators	Favor status quo. Dam removal is a threat to current subsidized power rates under 1956 contract.	1000% increase in electrical utility rates would devastate local economies dependent upon agriculture.
Native American Tribes	Klamath Karuk Hoopa Yurok	Not “just another stakeholder”. Expect treatment as sovereigns with govt. role to uphold their trust obligations. Favor restoration of ecosystem. Dam removal is key element. holistic management principles, traditional ecological knowledge, adaptive management	Irrevocable & Irretrievable loss of trust resources. Potential improved access to food security with concomitant improvement in health of community members.
Fed/State Agencies	NOAA Fisheries USFWS California State Energy Commission California SWRCB	Protect, Mitigate, Enhance Endangered Species. Full volitional fish passage. Dam decommissioning may represent most bang for the buck trading low power generation for high environmental returns. Section 401 of CWA will ensure water quality sufficient for habitat restoration	At a minimum will gain fish passage using Section 18 of FPA, which at a maximum may make the project uneconomical thereby forcing dam removal onto the negotiation table. New water quality restrictions may lock up project in expensive litigation after new license order granted.
Environmental NGO’s	American Rivers California Trout Trout Unlimited WWF PCFFA	Dam removal is a cost effective solution compared with fish passage requirements. Substantially in alignment with tribal interests	Enactment of several key environmental restrictions not present in original license term. Severely restricted ocean harvests versus hope for continued way of life.

PacifiCorp

A logical place to begin an overview of the stakeholders is with the project operator itself. As previously noted, PacifiCorp is based in Portland, Oregon. They are an electric utility corporation specializing in coal, hydro, gas-fired, and wind power generation. They serve approximately 1.6 million customers and have a power generation capacity of 8,400 megawatts. Currently, they have 53 hydropower facilities located throughout the West, which generate 1,078 megawatts of their total power production profile. They value their hydropower facilities highly due to hydro's superior ability to respond to peaking energy demands such as heavy use periods in the summer months when customers turn on their air-conditioning (PacifiCorp, 2005b). Besides the Klamath relicensing, PacifiCorp is currently engaged in another FERC hydroelectric relicensing on the Lewis River in Washington. In 1991, PacifiCorp underwent its first small hydroelectric relicensing process for the Condit Dam on the White Salmon River in Washington. This relicensing case ultimately resulted in a negotiated settlement to decommission the Condit Dam rather than face the significantly high costs of installing fish passage facilities that would almost assuredly have been prescribed by NOAA Fisheries under Section 18 of the FPA.⁶ Although the Condit relicensing represented a much smaller case that was wholly contained within one state's jurisdiction and was significantly less complex than the Klamath relicensing, it does present a useful analysis.

⁶ A detailed analysis of PacifiCorp's path to creating a negotiated settlement on the Condit relicensing is contained in Charlton Bonham's 1999 article, "The Condit Dam Removal and Section 18 of the Federal Power Act: A Coerced Settlement."

First, decommissioning the Condit Dam will remove the only obstacle to fish passage on the White Salmon River. Therefore, it represents a significant opportunity to restore endangered salmonid species in the lower Columbia Basin. Secondly, the decommissioning proved that the federal/state fishery agencies could utilize Section 18 of the FPA as a hammer to induce an operator to consider dam removal as viable economic option in lieu of facing the relatively higher costs associated with installing fish passage facilities. Finally, and more directly related to the Klamath relicensing, it shows that PacifiCorp has a history of operating in good faith in negotiated settlement proceedings with other stakeholders, especially the Yakima Nation Tribe (Bonham, 1999).

PacifiCorp has acknowledged the desires of numerous interested parties in the relicensing to restore salmonid species habitat above the project. However, they contend that water quality and fish habitat in the Upper Basin is in such poor condition that removal of the dams would actually further degrade water quality below the project. This position on the part of PacifiCorp is an obvious example of just how contorted the path to building scientific consensus can be. PacifiCorp's contention that their project dams actually improve water quality downstream by trapping pollutants and sediment is inimical to tribal conceptions of cultural resource management and is not supported by their empirical observations of the 2002 fish kill and continued declining salmon runs. In addition to refuting the notion of dam removal as an option to restore fisheries, PacifiCorp has also rejected two other significant project alternatives. Briefly stated here, they find that considerations of the actual costs associated with dam removal operations

and sediment removal used far too low of an estimate⁷ and that the California Energy Commission's (CEC) contention that the project economics did not merit consideration of relicensing were erroneously calculated (Olson, 2004).⁸

As part of PacifiCorp's participation in the early collaborative process, they funded a series of tribal cultural resource reports. One of the reports attempts to describe a "Klamath Riverscape" that could be eligible for inclusion in the National Register of Historic Places under the National Historic Preservation Act (King, 2004). PacifiCorp acknowledges, "The reports clearly reflect the current interests, values and objectives of the tribes in the relicensing and provide background cultural information" (Olson, 2004). However, PacifiCorp refutes the tribes' notion of a "cultural riverscape" and find it irrelevant to the FERC's decision matrix since no such riverscape has ever been included in the Register of Historic Places before.

Klamath Water Users Association

The Klamath Water Users Association (KWUA) is a non-profit corporation focused on representing the interests of the Upper Basin farmers and irrigators that are dependent upon the BOR's Klamath Irrigation Project. The KWUA has been in existence since 1953 and has a membership consisting of "rural irrigation districts and

⁷ PacifiCorp contends that The Klamath Dam Removal Investigation Report (Gathard 2003) was a feasibility study in nature and not representative of the final costs of removal.

⁸ CEC states the value of Klamath Project power should be \$70 per MWh and \$48.5 million annually. PacifiCorp contends that \$70 figure was generated using a 30-year averaged "on-peak" value, and that it is more appropriate to use a 30-year levelized value of both "on-peak" and "off-peak" value of \$59 per MWh.

other public agencies, as well as private concerns who operate on both sides of the California-Oregon border” (Klamath Water User's Association, 2005). They contend that KWUA members are the “lifeblood” of local economies and communities within the irrigation project.

The KWUA’s position on the Klamath relicensing is clearly and strongly in support of the FERC’s No-action Alternative. They are opposed to removal of any of PacifiCorp’s dams or power generation facilities. Additionally, they are generally in support of the Final License Application that PacifiCorp submitted to the FERC.

For a more nuanced understanding of the KWUA position, it is important to understand the relationship of irrigated farming to hydroelectric power consumption. Successful irrigated farming in the Klamath Basin depends on access to low-cost electricity, as energy consumption is a major cost of doing business. Indeed, a historical major mission of BOR hydroelectric projects throughout the nation has always been to provide farmers with a federally subsidized source of cheap power. The Klamath Basin farmers obtained such a source of cheap reliable power when PacifiCorp negotiated a contract with the BOR in 1956 to extend the terms of a previous 1917 agreement. This extension of the contract allows PacifiCorp to operate the Link River Dam, which controls the level of Upper Klamath Lake, under the BOR’s direction. KWUA simply calls this agreement the “1956 Contract” (2004). Under the 1956 Contract, PacifiCorp provides hydroelectric power to Klamath Irrigation Project farmers that is significantly

below current market costs (McCarthy, 2002).⁹ This is important, as the KWUA clearly desires a status quo FERC relicensing that adheres to the terms of the 1956 contract with the BOR.

Further confusing this issue is a disagreement over just how much operational flexibility PacifiCorp has in the operation of the Link River Dam. PacifiCorp contends that they have enjoyed little control over the flow releases from the dam since 1997 when the BOR was required to comply with a USFWS biological opinion under the ESA to protect Lost River and Shortnose Suckerfish (Federal Energy Regulatory Commission, 2005b). PacifiCorp contends that they no longer enjoy the benefit of the 1956 Contract owing to the BOR's amended direction to them to manage the lake level for the benefit of the endangered species, while KWUA contends that PacifiCorp still maintains a certain degree of operational flexibility to optimize its power generation (2004). The KWUA argues that without the terms of the 1956 Contract remaining in effect, they would realize an immediate 1000% increase in the rate they pay for hydroelectric power. This, they claim, would cause devastating consequences for their way of life and immediate impacts on the local economies of the region.

⁹ Example: 0.3¢ to 0.6¢ per kilowatt hour within the Klamath Irrigation Project compared to 5.44¢ to 5.55¢ per kilowatt hour for other agricultural producers in Oregon and California outside the Klamath Irrigation Project.

Tribes

Obviously, the tribes of the Klamath Basin have had the longest residence time (since time immemorial) on the river and concomitantly the longest observed empirical record of environmental conditions of the entire ecosystem. It might be difficult to describe a single unified position that all the tribes involved in the Klamath hydroelectric relicensing share in common. However, the tribes are weary of a western system of environmental management that is primarily based upon short-term fixes (generally single-species focused utilizing the ESA) over long-term holistic management principles. The tribes have always felt a sense of duty to protect the river ecosystem to maintain their way of life. They will never accept that the conditions of the river are so degraded that they do not warrant special consideration for renewal or restoration. One author summed up such a sentiment by stating:

The [tribes view] is that the river although altered maintains its centrality to the core of their existence. Its integrity is forever under attack. They regularly use terms such as “last hope” or “last chance” when referring to the possibility of maintaining the river’s place in their cultural lives. (King, 2004, 26)

The tribes have a sense that the FERC relicensing on the Klamath represents such a last hope or chance for them to begin a process of renewal of their old lifeways based upon subsistence and reciprocal relationships with the ecosystem.

All of the tribes historically observed a rich tradition of customs and ceremonies that ensured their placed-based cultures enjoyed a relatively easy lifestyle. Commenting specifically on the Lower Basin tribes, one author stated, “The Karuk, Hupa and Yurok

were, until relatively recently, the wealthiest people in what is now known as California. The basis of this wealth was the abundance of natural resources, most prominently salmon” (Norgaard, 2004, 6). However, if they once enjoyed great wealth, they also have directly born witness to the tremendous changes that have occurred in the basin since the coming of European settlement. One source summed up the racial divide within the basin and the tribe’s plight stating, “The Yurok, Hupa, Karuk, and Klamath tribes have been the hardest hit during the long decline in the Klamath Basin's habitat” (McCarthy, 2001). The tribes have not given up their faith and have emerged in the relicensing as some of the staunchest supporters for basin-wide ecosystem restoration.

A key concept to understanding the tribes’ positions on the Klamath relicensing (or any major federal project), is that the tribes do not consider themselves as just another stakeholder. Instead, they emphasize their role as sovereigns with a specific right to expect government-to-government consultation with the FERC. As noted in Chapter Two, the FERC issued a policy statement on consultation with Indian tribes. In this statement the FERC outlines their role in interacting with the tribes as,

The Commission will endeavor to work with Indian tribes on a government-to-government basis, and will seek to address the effects of proposed projects on tribal rights and resources through consultation pursuant to the Commission’s trust responsibility, the Federal Power Act,...and in the Commission’s environmental and decisional documents. (“Policy Statement on Consultation with Indian tribes in Commission proceedings,” 2003)

The FERC’s project coordinator for the Klamath relicensing (Mr. John Mudre) and the FERC tribal liaison representative (Mr. Rollie Wilson) completed a round of meetings

with each of the federally recognized tribes in January 2005. At those meetings, the FERC representatives noted the purpose for the meetings was to get the tribe's positions on the relicensing in the public record. It was not clear from their perspective whether the round of meetings met the letter and spirit of the requirement for government-to-government consultation. In the meeting the FERC held with the Yurok tribe, the tribal liaison representative explained some of the special procedural elements, and organizational commitments the FERC has that frustrates its ability to consult with the tribes. In his explanation, he outlines how part of their frustration stems from the quasi-judicial nature of the FERC. He specifically states,

We make decisions kind of like a court in addition to our agency functions. And so the tension for us comes in meeting the tribes in a government-to-government consultation, but also in trying to prepare to address to the public, follow due process concerns, administer the Procedure Act regulations as well as our ex parte regulations prohibit us from talking to one party without talking to all parties once the protest or proceeding has begun. (Mudre, 2005b)

From the statements made by various tribal members at the beginning of the meetings, one could conclude that the meetings did not meet the standard of government-to-government consultation from the tribe's perspective. In the meeting with the Yurok Tribe, one tribal member questioned the need for recording the meeting and making it a part of the public record. However, none of the statements made by tribal members was clearer on the issue than those made by Mr. Leaf Hillman, Vice Chairman of the Karuk Tribe. He states,

I'm going to begin my brief statement by giving a disclaimer for this meeting before it formally begins. Pursuant to the Klamath Hydroelectric

Project, FERC No. P-2082-027, and the Executive Order 13175, which was created to engender the government-to-government relationship between the Indian tribes and the federal government, the Karuk Tribe had hoped to have a true and honest government-to-government meeting with representatives of the FERC. This is particularly true when a government agency is exercising policies that have tribal implications...Since the formation of the Union, the United States has recognized Indian tribes as dependent nations under its protection. The federal government has enacted numerous statutes and promulgated numerous regulations that establish and define a trust relationship with Indian tribes as well as define what true government-to-government consultation with Indian tribes means...But the Karuk Tribe wishes to express our fundamental disagreement with the FERC concerning the definition of the government-to-government consultation...and to formally state on the record that we, the Karuk Tribe, do not consider this meeting as a formal government-to-government consultation. We consider this meeting outside the realm of that special relationship. (Mudre, 2005a)

This statement clearly shows that there is a fundamental disconnect between the FERC's conception of the requirement to consult and the tribes' expectations.

In addition to the responsibility to consult, as alluded to in the above quotation from the Policy Statement, all federal agencies have a responsibility to uphold the tribal trust. The specifics of this "trust obligation" or "trust doctrine" are imprecise but can safely be viewed as the placement of "parameters" on federal agencies that regularly require a prioritization toward Indian interests (Zellmer, 2002, 433). The tribes of the Klamath Basin understand that the trust obligation of the government does not only apply to the lands they hold in trust but also encompasses species upon which they are traditionally dependent to maintain their livelihoods and cultures. For the Lower Basin tribes this primarily means salmonid species but also includes other species such as lamprey, sturgeon, and candlefish. For the Upper Basin tribes this means sucker fish

species but also includes numerous other species such as resident trout, deer, and elk. The above two examples are far from all-encompassing, but the tribes understand that the obligation of the government to protect trust species goes far beyond the few species that have been listed as threatened or endangered on the ESA. The tribes view the obligation to uphold the trust resources as an explicit requirement of the government. An example of this general feeling was illustrated by a statement made by Ms. Sandi Tripp in the FERC meeting held with the Karuk Tribe. She states, “The relicensing of the Klamath River Dam is an irreversible and irretrievable commitment of the cultural and trust resources of the Karuk people” (Mudre, 2005a, 3). This issue of the trust responsibility of the government may be another area in which there is a fundamental disconnect between the tribes and the FERC.

In the scoping documents, the FERC acknowledges its responsibility to evaluate, in the EIS, the project effects on endangered species as well as tribal trust resources (2005b, 91). The fact that the FERC acknowledges an obligation to evaluate project effects on trust resources would at least create a climate of hope for the tribes. However, the exact definitions of what obligation this places upon the FERC are imprecise and lack explicit direction, especially when considering other species not listed or proposed to be listed on the ESA at the time they receive the final license application from the operator. Clearly, the FERC does not have the same understanding of what constitutes the full range of trust responsibilities in the same manner that the tribes do. The relicensing process itself is skewed toward placing the largest burden of responsibility for protecting endangered species upon the agencies with conditioning authority, which in this case will

be either the NOAA Fisheries or the USFWS. The FERC merely responds to the demands of those two agency's mandatory conditions when it drafts the final license order thereby setting the operating parameters upon the licensee. For the FERC to more fully consider its trust obligation, it would have to stem not from the ESA's Section 7 duty to consult clause, but from the more general clause in Section 10 (a) of the Federal Power Act requiring the FERC to craft a comprehensive plan to, among other things, provide for the adequate protection, mitigation, and enhancement of fish and wildlife.

The tribes of the Lower Basin were never agriculturally based societies. The bulk of their traditional diet came from the consumption of salmon, lamprey, and the collection of acorns. One preliminary report conducted by Dr. Kari Norgaard on behalf of the Karuk Tribe has garnered considerable national attention. In this report, she considers the health consequences of altered traditional diet and the tribe's access to food security. She finds that the Karuk traditionally consumed an estimated 450 pounds of traditional fish per person per year. Now they consume less than 5 pounds of salmon per person per year. This dramatic change in diet has had serious health consequences on tribal members including skyrocketing rates of diabetes and heart disease. The report concludes by stating, "Access to traditional food sources of salmon are also a basic human right. Access to salmon is also a matter of religious freedom. Numerous international treaties recognizes the right to food security and food sovereignty" (2004, 52). A representative from the FERC commented publicly on the report by Dr. Kari Norgaard about Karuk traditional diet. Mary Morton a legal advisor to Commissioner Mead Brownell stated, "The Karuks have raised something novel and

FERC commissioners will have to grapple with it” (Harden, 2005). In an interview with Kelly Catlett who is a hydropower reform policy advocate for Friends of the River, I asked her whether this “novel” approach has potential to lead to greater substantive changes in FERC relicensing policy. She responded:

The Karuk health study is novel. We have NGO experts with 20 or more years experience. This is the first time where a party has tried to make a link between the project and public health. This is not something the FERC is used to seeing. It is groundbreaking. What you do is establish a case for impact, and here is how we mitigate for them and evaluate their case. There is no clear precedent or direction for the commissioners if it is a valid thing that can be mitigated for. It will either set a good or bad precedent, but it will not become part of a checklist based on only one instance. Parties will have to generate their own data on a case-by-case basis. You would need another amendment by Congress to force the FERC’s hand. It would be hard to convince them to create this as a part of their own internal rulemaking. It is going to be incumbent on each party to build their own case. (Catlett, 2005)

This opinion is substantially in alignment with David Spence’s argument that, “...the FERC has consistently made policy on a case-by-case basis, through individual license orders...(and) the FERC has steadfastly and explicitly defended its right to use adjudication rather than rule makings to make new policy in its hydroelectric relicensing program” (1999, 429).

It remains to be seen how heavily the FERC will actually weigh this novel approach to considering the environmental justice consequences in the relicensing through linking the project impacts to public health. From the findings of Spence’s article, it is apparent that the FERC may consider the merits of any novel approach promulgated by the tribes for this relicensing proceeding only, based upon the material

presented before them. However, no matter how persuasive the argument is, nor how much weight they chose to give in this specific case, it is unlikely the FERC will see this novel approach as precedent setting or binding upon them to create broad new procedural changes.

Agencies

There are numerous federal and state agencies operating in the Klamath River Basin that will have some bearing upon the FERC relicensing. However, none carry quite the same weight as the US Fish and Wildlife Service (USFWS), and the NOAA Fisheries because of their specific role in upholding the public trust in preserving threatened and endangered species under the ESA. In addition to the ESA, the federal fisheries agencies have a particularly strong role in any relicensing case owing to their specific conditioning authority to require fish passage under Section (18) of the Federal Power Act. The ESA has frequently been cited as an “environmental hammer” in numerous federal proceedings. It has even been termed the “pitbull of environmental legislation” (Johansen, 1994, 16). Similarly, the Section (18) authority of the fisheries agencies can certainly be seen as a huge consideration for the FERC to weighing the relative cost-to-benefit ratio between energy production and environmental mitigation measures. As previously noted, Charlton Bonham has evaluated the Condit Dam removal case and the specific role that Section 18 had on coercing PacifiCorp into accepting a settlement agreement to remove the dam. Specifically, he states, “Unquestionably, the federal fish agencies’ section 18 powers greatly influence today’s FERC license and

relicensing proceedings” (1999, 119). One of the specific reasons he finds that section 18 is so powerful is that unlike section 10(j) protection, mitigation, and enhancement measures under the FPA, section 18 prescriptions must be incorporated fully without modification. Additionally, Blumm stated, “The Condit Dam removal could become the first in a wave of dam removals, prompted by either Section 18 fishway conditions or Section 4(e) federal land reservation conditions, at least concerning economically marginal projects seeking FERC relicenses” (2002, 247). Numerous governmental agencies, the tribes, and NGO’s have gone on record requesting fish passage in the Klamath relicensing. “Most entities specify that volitional upstream and downstream passage should be the long-term restoration objective” (Federal Energy Regulatory Commission, 2005b, 37).

However, the scoping document also notes that USFWS and NOAA Fisheries believe the FERC should also analyze non-volitional alternatives such as trap and haul or some combination of the two. The trap and haul method has been used by the Army Corp of Engineers on the Lower Snake River in Washington for over 25 years with little impact on long-term declines in salmon runs. It has been sharply criticized by all sides as being extremely costly while at the same time failing to provide for long-term recovery of endangered species in the Columbia Basin. Blumm identified eight separate scientific studies that criticized the transportation plan as faulty.¹⁰ “Several scientific studies in recent years have called into question the efficacy of continued reliance of truck and

¹⁰ Blumm notes the most important study was the one conducted by The Independent Peer Review of Transportation (1994) which found, “The transportation [plan] approved by the NMFS BiOp was unlikely to halt or prevent continued decline and extirpation of listed species of salmon in the Snake River Basin.”

barge transportation as the linchpin of Snake River salmon recovery efforts. These reports have suggested that a better alternative would be a program based on restoring natural river conditions” (2002, 282). As such, it seems unlikely that the FERC would choose to implement it as a long-term strategy for the Klamath. This is especially so when one considers that there are no major improved highway linkages between the lower portion of the river and the Upper Basin beyond the dams. However, even if the federal fisheries agencies ultimately chose not to propose trap and haul methods in lieu of prescribing fishways under Section 18 of the FPA, PacifiCorp may be able to appeal and request it as an alternative to the Secretary of the DOI utilizing the new process contained in the 2005 Energy Bill.

In 1988, the USFWS listed the Upper Basin shortnose sucker and the Lost River sucker fish species as endangered under the ESA. In 1997, the NOAA Fisheries (then National Marine Fisheries Service) listed the Southern Oregon Northern California Coast “evolutionary significant unit” of Coho salmon as threatened under the ESA (National Research Council, 2004, 1). These two listings caused the federal agencies to formulate biological opinions (BiOps) and the BOR to formulate a biological assessment (BA) in 2002. The two BiOps and the BA are set to cover a 10-year period. These documents form the essential management scheme for the current operations of the Klamath River. They make it incumbent upon the BOR to simultaneously regulate the level of Upper Klamath Lake to protect habitat for the suckers, and regulate the outflow from Iron Gate Dam to protect the Coho salmon downstream of the project.

In addition to the mainstem Klamath, in 2000, the USFWS created an Environmental Impact Statement (EIS) under NEPA for the Trinity River, which is the largest tributary of the Klamath River. This EIS resulted in the formation of a Record of Decision (ROD) that requires a greater amount of water be sent down the river to protect habitat for the Coho, water that had previously been diverted out of Lewiston Dam to agriculture in the Central Valley of California. The ROD also mandates an adaptive management approach to evaluate the altered flow and habitat recommendations. The increased flows mandated by the ROD have been seen by some as essential to bringing cold clear water to the Lower Klamath Basin to prevent another late season fish kill like the one that occurred in 2002. However, the Hoopa Tribe strongly disagrees with using the ROD water for this purpose. Instead, they contend that it is incumbent upon the BOR to mitigate against warm low quality late seasonal flow in the Lower Klamath River using water from the Klamath Project (Marshall, 2005).

A key area of contention in the Klamath relicensing is the issue of historical distribution of fish into the Upper Basin. A new report produced by the two federal fisheries agencies finds that Chinook salmon, steelhead, Coho salmon, and Pacific lamprey once migrated above the level of Iron Gate dam. They further found that Chinook salmon once migrated well above the Upper Basin to the Sprague and Williamson Rivers, headwaters of the Klamath. They contend that this definitive documentation is key to future restoration opportunities (Hamilton et al., 2005). The issue of historical distribution is contentious for at least two reasons. First, PacifiCorp repeatedly attempts to diminish the capacity of the upstream habitat to support the

reintroduction of salmonid species above Iron Gate dam, thereby questioning the validity of utilizing dam removal as an option to achieve restoration objectives. Second, as previously stated in this chapter, the FERC utilizes the “no-action” alternative (project as currently licensed) in establishing the environmental baseline conditions. It is not entirely clear from the literature how the FERC might choose to utilize the data, which suggests a strong historical distribution of salmon migration into the Upper Basin.

The California Energy Commission is the State’s lead energy information agency. Like the FERC, the Energy Commission is responsible for balancing the needs of a reliable energy system with environmental preservation. In its Integrated Energy Policy Report for 2003, the Commission found that the FERC has had most of California’s hydroelectric capacity locked up in at least 30-year licenses. They find that the FERC licenses have not afforded the State of California with an opportunity to bring the management of its rivers into compliance with current environmental standards. When the California Energy Commission conducted a preliminary assessment of the Klamath relicensing case, they essentially found that full dam decommissioning offers what may be the most bang for the buck in trading off low-value power generation for environmental restoration. Additionally, they found that adequate replacement energy is available both locally and regionally, and that the loss of the Klamath hydroelectric project’s capacity would not significantly affect PacifiCorp’s ability to deliver power to its 1.6 million customers. In a staff report on *California’s Hydropower System: Energy & Environment*, the California Energy Commission found that,

By adjusting and re-balancing the margins of California's hydropower system, important restoration benefits can be achieved while maintaining the important attributes of hydroelectricity. On a megawatt to megawatt basis, removing a relatively small amount of hydroelectric capacity may provide the greatest return on restoration investment of any energy resource. (McKinney, 2003, D35)

Perhaps what makes the above quote so remarkable is that it comes from a state agency that ostensibly should be advocating for status quo in terms of retaining all available sources of power generation following the California energy crisis. It should also be noted that the Klamath case is the first time the Energy Commission intervened in a FERC relicensing and that they did so at the request of the California State Water Resources Control Board. The FERC will undoubtedly have to give serious consideration to the California Energy Commission's findings when it evaluates the balance between power generation and environmental preservation.

The California State Water Resources Control Board (SWRCB) has been delegated authority under the Clean Water Act (CWA) to regulate water quality in the state. Specifically, they are the agency in California with authority to issue certification for the Klamath hydroelectric project relicensing under Section 401 of the CWA. Section 401 of the CWA authorizes state agencies to veto a proposed project if it cannot be assured the project will meet minimum federal or state standards for water quality measures such as dissolved oxygen, temperature, turbidity, and other traditional measures (Echeverria et al., 1989).¹¹ The issue of the state's right to condition a FERC relicensing to comply with water quality standards is likely to be highly contentious on the Klamath

¹¹ As an interesting side note, the Hoopa Tribe is the only tribal entity involved in the Klamath relicensing to have been granted Section 401 authority by the EPA and standing similar to the states for setting water quality standards on the Trinity River.

case. The state of California is pending completion of new Total Maximum Daily Loads (TMDL's) water quality guidelines for the Klamath River. The FERC notes that if the TMDL guidelines are finalized prior to their completion of the EIS, they will have to consider the project's consistency with the newer water quality criteria (2005b).

One key area of controversy is the effect of the Klamath River system's hydroelectric project reservoirs on nutrient loading downriver. PacifiCorp contends that the major source of nutrient loading comes from Upper Klamath Lake and that the reduced transit time of water through the project reservoirs (several weeks versus a few days) actually prevents the nutrient loading from reaching the Lower Basin. The California SWRCB contends that in arriving at such conclusions PacifiCorp has relied upon flawed water quality modeling that has not been adequately peer reviewed (2005).

In addition, the SWRCB finds that,

PacifiCorp has an obligation to provide alternatives that will aid in the restoration of threatened Coho salmon, provide opportunities to return spring run Chinook salmon to the Upper Klamath River, and increase populations of fall run Chinook and steelhead trout. This can be achieved by improving water quality to a level that meets water quality standards, and providing access to important historic habitat...substantial evidence exists that anadromous fish can be successfully reintroduced above Iron Gate Dam. (2005, 5)

From the above statement, it appears clear that the State of California intends to utilize its full section 401 conditioning authority to compel nothing short of water quality satisfactory for habitat restoration.

Environmental NGO's

Numerous environmental non-profit organizations or non-governmental organizations are at work in fulfilling a vision of a restored ecosystem in the Klamath River Basin. It is impractical to discuss all of them in detail. Instead, I will focus on a combined position put forward by four of the key environmental NGO's. These organizations are: American Rivers, California Trout, Trout Unlimited, and the World Wildlife Fund. The above organizations also happen to be parties to the ongoing settlement negotiations as an alternative to the traditional FERC relicensing.

Additionally, American Rivers is one organization that is also a part of the Hydropower Reform Coalition. Trout Unlimited is America's largest cold water conservation organization with 130,000 members nationwide (Mudre, 2004a). The World Wildlife Fund is the largest conservation and environmental organization. They consistently take the position that the incredible endemic diversity of plants, animals, fishes, and mollusks in the Klamath Basin make it unique enough to warrant consideration as a world heritage site. The WWF took a position early on that the FERC rushed to judgment to early on in eliminating the possibility of federal takeover of the project. They specifically requested that the FERC leave that option on the table in this relicensing proceeding (Mudre, 2004b).

Simply stated, the position of most of the environmental organizations at work in the Klamath Basin is that dam removal should be "on the table" for this relicensing proceeding. More specifically, the conservation organizations do not endorse dam

removal per se, stating only that adequate studies need to be undertaken by the FERC and PacifiCorp to fully evaluate dam removal as an option that is keeping with the public interest in the relicensing.

The above named environmental NGO's conducted a study released in July 2004 in which they found PacifiCorp could remove the Klamath dams cheaply and safely. One of the reasons their study cites dam removal as a cheaper alternative than other sources have estimated centers on the issue of sediment removal costs. In their study, the NGO's find that the Klamath River could quickly carry the sediments to the ocean without significant impact to the lower reaches of the river. Allowing the natural flow to remove the sediment would save a tremendous amount of money in dredging and hauling costs. Additionally, they found that dam removal might be a cheaper option than installing fish passage facilities. Indeed, they argue that "the four lowest dams could be dismantled and safely disposed of for less than \$40 million. By contrast, the construction of fish ladders and fish screens at those same four dams could cost up to \$150 million" (American Rivers, 2004). This brings up a significant issue associated with the federal fisheries agencies' ability to set section 18 fishway prescriptions. Section 18 fishway prescriptions are mandatory, leaving the FERC little room to create alternative solutions. As previously stated, the federal fisheries agencies have gone on record in favor of full volitional fish passage throughout the system. If the above study is even close to correct in their estimation of the relative costs of removal versus installation of fish passage, then it could indicate a key reason why PacifiCorp is keen to seek a negotiated settlement option to seek alternative solutions and avoid the costs. PacifiCorp clearly proved its

desire to seek settlement on the Condit Dam relicensing when it faced extraordinarily high costs of installing fish passage in comparison the relatively low value of power production.

While not really an environmental NGO, the Pacific Coast Federation of Fishermen's Associations (PCFFA) is an industry trade group that fights to protect the interests of individual and commercial fishermen and their way of life and offers a unique perspective on the relicensing debate. The PCFFA is at work on the west coast from San Diego to Alaska and considers itself to be a "bottom up" organization that helps to ensure working class fishing men and women will be able to earn a livelihood by bringing the ocean harvest to market. Their primary interest is in preservation of the ecosystem to ensure the long-term health of the fishery and a sustainable harvest for the industry. To ensure this goal is met, they work toward obtaining an all-inclusive habitat protection program that encompasses healthy rivers, forests, wetlands, and marine estuaries even though their primary site of production is offshore. In short, they realize that a bountiful ocean harvest of salmon and other aquatic species is closely dependent upon the health of the overall watershed (2005).

In July 2004, the PCFFA appealed to the President of the United States for disaster relief assistance. In its letter, it outlined its belief that an impending disaster will occur in the commercial harvest of salmon off the coasts of Oregon and California. The proximate cause of the impending disaster was the Klamath River fish kill of 2002. Due to this and other causes of declining salmon runs on the Klamath River, the Department of Commerce through the Pacific Fisheries Management Council had to take steps to

severely restrict ocean commercial harvest of salmon from the Columbia River to the Monterrey Peninsula. These measures were imposed even though the Sacramento River has seen much improved salmon runs over the past several years. In an ocean harvest situation, it is impossible to differentiate salmon having their origins in the Klamath versus the Sacramento runs. This is known as “weak-stock” management that seeks to preserve the integrity of the weakest salmon runs by setting limits that prevent the potential for overfishing (2004).

Although the PCFFA would traditionally be at odds with the tribes and the NGO’s representing recreational fishing interests, it has made common cause with both in the Klamath hydroelectric relicensing. Like many other stakeholders in the FERC relicensing, it is requesting either full dam decommissioning or full volitional fish passage for both upstream migration of adult salmonid species and downstream migration of juveniles (Federal Energy Regulatory Commission, 2005b).

Description of Settlement Negotiation Process

The FERC has consistently promoted the option of collaborative settlement as an alternative to the traditional licensing process. The general idea is that if the stakeholders involved in a relicensing case can achieve a suitable settlement through collaborative means, then the FERC can adopt the tenants of the settlement into a new license order. Obviously, this option has the potential to significantly reduce the FERC’s relicensing workload by encouraging participants to seek their own solutions. Beginning in 1997, the FERC codified settlement as an official option to the traditional relicensing process.

The benefits of settlement negotiations over the traditional “include development of comprehensive community based water resource management plans, decreased numbers of disgruntled stakeholders, diminished litigation expenses, lower relicensing costs, better relations between interested parties, and quicker relicensings” (Bonham, 1999, 124). In addition, in its 2003 Annual Report, the FERC finds that the settlement option reduces its own processing time after an application for relicensing is received to less than half that of the traditional process (Federal Energy Regulatory Commission, 2003).

Even though numerous parties involved in previous relicensings prefer the settlement option, the FERC does not drop the traditional licensing process once the participants engage in settlement negotiations. Both processes run simultaneously. John Mudre, the FERC project manager for the Klamath relicensing summed up their reasoning for maintaining both processes by stating that

The Commission does like settlement agreements. We think they lead to good licenses. But, at the same time, we’ve taken the approach that we can’t wait around for a settlement to occur as we’ve been burned a few times and had promises – yes, the settlement is imminent. It’s imminent. And five years later we’re still waiting around. So our practice at this time is to continue processing the application while the settlement negotiations are going on. (Mudre, 2005b, 15)

As previously shown, PacifiCorp utilized a settlement negotiation process to arrive at a suitable relicensing agreement on the Condit Dam in Washington. Beginning in early 2004, PacifiCorp first began proposing settlement as an alternative to the FERC traditional relicensing process to the other stakeholders in the Klamath River Basin. At a

Klamath plenary session held in Yreka California in July 2004,¹² Toby Freeman who is PacifiCorp's hydroelectric relicensing project manager, proposed the option of settlement to a broad cross-section of stakeholders. In that meeting he noted that PacifiCorp probably has the least risk going into a settlement negotiation while the federal and state agencies assume the greatest risk owing to the greater potential for litigation down the road. He also noted that the benefits of settlement for them were closure on the relicensing and increased predictability of the outcome. Russ Kanz from the California State Water Resources Control Board noted that the traditional licensing process rarely results in an outcome that is suitable to a majority of stakeholders and that it is much preferable for the parties to sit down at the table and agree on the terms of the relicensing (PacifiCorp, 2004).

One of the toughest choices in engaging in a settlement negotiation process is striking an appropriate balance regarding whom to allow at the table. Should the process be limited to only a few key state and federal agency leaders and the operator, or should it be fully open to a broad cross-section of all interested parties to the relicensing proceeding? In PacifiCorp's evaluation of the options, it found that the earlier case afforded a greater "do-ability" index due to having a limited number of participants at the table, but increased the risk of criticism due to public perceptions that the process was not inclusive enough or lacked transparency. On the other hand, the later case decreased the risk of public outcry over lack of inclusiveness, but increased the likelihood that the

¹² The author was present at the Klamath Plenary Group meeting in Yreka, CA and heard the concerns expressed by the various potential settlement negotiation participants first hand; however, the summary above comes from a meeting transcript available on PacifiCorp's Klamath hydro relicensing website.

process would drag on due to an inability for participants to achieve agreement and would therefore be more open to litigation or challenge (PacifiCorp, 2004).

Ultimately, the Klamath relicensing participants chose a middle path between the two extremes. In addition to PacifiCorp, the settlement participants include, key federal and state agency leaders plus their staff, representatives from each of the four federally recognized tribes, and representatives from several of the key environmental NGO's.

For the tribes, it was very important that each of the four federally recognized tribes be fully represented at the negotiation table versus using an aggregate representative. They felt that their relative bargaining position would be weakened by utilizing an aggregate representative. Since each tribe has status as a sovereign governmental entity in the traditional relicensing process, there was no incentive for them to accept less than full representation in negotiation. Additionally, since some of the tribes were involved in ongoing litigation with other stakeholders in the process, there was some risk that they would be constrained in their ability to negotiate.

Another issue of concern with settlement is whether the FERC should be an active participant or whether they should simply remain detached and wait for a final settlement agreement to be transmitted to them. At the request of the settlement participants, the FERC can detail a detached staff element to work directly with the settlement participants. This has an added advantage of making sure that any settlement agreement that is reached will ultimately be in a form that the FERC can utilize in creating a new license order.

The Klamath relicensing settlement participants have entered into confidentiality agreements not to reveal the progress of the ongoing process. Due to the confidential nature of the process, it is difficult for anyone outside the process to make any realistic assumptions on the potential outcome. It remains to be seen whether the FERC will ultimately arrive at a new license order for the Klamath Hydroelectric Project via the terms of a negotiated settlement or through the traditional license process. It also remains to be seen whether the settlement option holds greater potential for creating outcomes that favor the restoration goals of the several communities involved in the Klamath conflict and whether it can heal the wounds through collaborative participation.

What is known is that the Klamath Basin has been locked into conflict, and that such conflict existed long before the hydroelectric system came up for relicensing. Status quo has not resulted in anything remotely approaching basin-wide ecosystem recovery. Communities in both the Upper and Lower Basin feel that their way of life is threatened. As previously stated, in creating his theoretical model for predicting restoration outcomes Dr. Lowry drew upon and synthesized literature from advocacy coalition scholars. One such scholar stated the following regarding the potential for negotiation: “In situations in which all major coalitions view a continuation of the current situation as unacceptable, they may be willing to enter into negotiations in the hope of finding a compromise that is viewed by everyone as superior to the status quo” (Sabatier & Jenkins-Smith, 1999, 149). Since the FERC has a long history of adhering to the status quo in the traditional relicensing process, settlement may be the preferred alternative for the basin to escape the political quagmire and begin the process of restoring healthy communities.

Broader Basin Stakeholder Consensus Meetings

There is one final group that has been working toward achieving long-term solutions for ecosystem restoration and relationship reparation among the several communities throughout the entire Klamath Basin. This group calls itself, The Greater Klamath Basin Stakeholder Community.¹³ The group has been holding three-day long workshops at various locations throughout the Basin for several years, with well over 150 different community members participating.¹⁴ The group claims to represent the interests of the entire Basin from the headwaters to the sea including commercial fishermen relying upon the Klamath ocean harvest for their livelihoods. Its makeup includes: local elected officials from both Oregon and California, tribal officials and tribal members, representatives of PacifiCorp, members and board members of the KWUA, agency officials at the state and federal level, commercial fishermen, environmental NGO representatives, higher education institution representatives, and numerous everyday community members from all walks of life throughout the basin. The workshops have been facilitated by Mr. Bob Chadwick of Consensus Associates based out of Terrebonne, Oregon.

¹³ It is important to note here that even though this group calls themselves “stakeholders”, they are not necessarily the same stakeholders involved in either the traditional FERC relicensing process or the ongoing settlement negotiations. However, there definitely is significant degree of overlap between both stakeholder groups as Tribal, Agency, KWUA, BOR, and PacifiCorp representatives have attended the Broader Basin Stakeholder Workshops.

¹⁴ The author participated in two workshops located in Klamath, CA and Yreka, CA. This was not done as a direct part of my research, but did provide valuable participant observation of many different viewpoints throughout the Klamath Basin.

In the beginning, these workshops were geared toward simply listening to the voices of the disparate communities throughout the Basin. Working from a basis of trust within the workshops, each participant was asked to carefully and completely as possible tell their own stories of their lives in the Klamath. At the Upper Basin workshops, the farmers and ranchers explained their difficulties and hardships, while in the Lower Basin the Tribal members and fishermen were encouraged to divulge their own stories of struggle to maintain their way of life. From that common basis of sharing their innermost fears, hopes, strengths, and limitations, the stakeholders were finally encouraged by the facilitator to move toward undertaking a series of visioning sessions to outline some of the best possible outcomes for the Basin as a whole.

From this visioning, the group eventually developed a set of collective short-term purpose statements. Key among the group's statements of purpose is that no single Klamath River community should have to suffer at the expense another's livelihood or way of life. Members of the group firmly believe that with the right mix of policy tools, they will be able to successfully develop win/win long-term solutions for management of the Klamath ecosystem, and that the water needs of both the fisheries and agriculture will be able to coexist peacefully. Ultimately, this group believes that it will become a model of from-the-ground-up crisis resolution and long-term sustainable solutions in a very complex ecosystem. The Greater Klamath Basin Stakeholders envision the eventual formation of a grassroots type of approach to achieving management objectives within the Basin. They believe if they can make it happen in the Klamath, it could potentially lead to a sort of revolution in thinking about how to establish long-term policy objectives

that will transcend the tradition top-down bureaucratic decision-making from on high. In the fall of 2006, they are scheduled to hold a Klamath Basin Congress, which will begin the process of designing a new template for the best management practices while keeping on-the-ground resource user needs in mind first and foremost.

Whether they will be able to achieve their somewhat lofty ambitions is certainly unknowable at this point. What is important is that as evidenced by their collective statements, they as a group firmly believe that not only is it possible, all other options have already been tried and have failed. It is unlikely that the work of this group will have much influence on the FERC relicensing outcome. However, because it is forming new stronger relationship ties among the several communities throughout the Basin, it is feasible that it could lead to the formation of a strong advocacy coalition, which, as Dr. Lowry notes, can break through many of the political barriers that cause disjointed outcomes in restoration objectives. The groundwork now being laid by the Greater Klamath Basin Stakeholder Community will ultimately transcend the FERC relicensing context. The communities living in the Basin will still be economically and spatially connected to each other no matter what conditions the final FERC licensing order requires. The important work of restoring the ecosystem will still be an important long-term objective long after narrow confines of the Federal Power Act as a policy instrument have shaped their future for the next 30-50 years.

Summary

In his book, *Community and the Politics of Place*, author Daniel Kemmis compares the differences between the Jeffersonian and Madisonian visions for what would become the ultimate form of governance in the United States. The former saw a vision of the nation being made up of mostly egalitarian rural farmers engaged in a Republican form of government having its foundation in the populace that is intensively engaged in working out solutions to public problems for the common good. The latter offered a Federalist alternative, having its basis in strict procedural mechanisms designed to ensure domestic tranquility through a complex system of checks and balances, which, along with an expansive western frontier, was designed to keep citizens apart and avoiding the tyranny of the majority (1990, 12). Kemmis notes that this mechanistic view of government is the one that was ultimately enacted and is still present today. Perhaps nowhere is this strict form of procedural governance designed to turn over community problems to a third party for resolution more evident than in the FERC hydroelectric relicensing process. Also, perhaps nowhere is the false mythology of an escape-valve inherent in an expansive frontier more challenged than in the Klamath River Basin. For all intents and purposes, the Basin is “full” in terms of resource extractive potential without further degradation of the ecosystem. Many of the communities in the Basin pin their hopes for an economically viable future in a vision of restoring the ecosystem for, among other things, subsistence and recreational potential. Kemmis draws upon the analysis of Georg Wilhelm Friedrich Hegel to criticize the escape-valve

offered by the frontier and its ultimate implications for our form of government. Hegel found that only after we were sufficiently “pressed back on each other” would we seek more mature forms of engagement through civil life and community involvement (cited in, Kemmis, 1990, 24).

This chapter has described how the Klamath Basin has been locked into an adversarial battle for decades, utilizing traditional Madisonian procedural mechanisms to find solutions to complex problems. The narrow confines and quasi-judicial nature of the FERC relicensing process are unlikely to break through this deadlock and lead to the kind of overarching fundamental ecosystem restoration objectives numerous stakeholders within the Basin desire. Many of the stakeholders within the Basin are acutely aware of how “full” the Basin has become and how the communities are “pressed back on each other”. They recognize the FERC relicensing process can only afford them a limited set of potential outcomes, with a high likelihood for creating disjointed outcomes and lose-lose scenarios for their economies and the ecosystem upon which they are based. Having come to this conclusion, numerous stakeholders see the option of settlement negotiations or direct involvement with one another through consensus and collaboration as offering a way through the Gordian knot.

CHAPTER FOUR

ANALYSIS OF FERC HYDROELECTRIC RELICENSING PROCESS AND KLAMATH CASE EXAMPLE

Introduction

By now, the reader should be quite familiar with the historical precepts and current debates as they exist in the Federal Power Act and the FERC relicensing process in general. Additionally, the reader should have a deeper understanding of an ongoing case example that illuminates some of the challenges hydroelectric relicensing faces in a complex and politically charged ecosystem such as the Klamath Basin. The essential work of this thesis is to evaluate the strengths and limits of a policy process of which the general public by and large has very little knowledge, but that nevertheless has potential for huge impacts for decades to come. This chapter will present an analysis of three key findings from qualitative data gathered in semi-standardized interviews with actual on-the-ground participants in the Klamath relicensing. The first finding considers the FERC's comprehensive planning mandate and to what degree it is inclusive of other worldviews such as tribal holistic management techniques. Secondly, the issue of tribal trust in relicensing is evaluated by comparing the FERC's own policy statement against the voices of both tribal and federal agency stakeholders in the Klamath Basin. Finally, the issue of timeliness in obtaining relicensing orders is considered as the FERC moves forward with the new Integrated Licensing Process. These focus areas have been and are likely to continue as critical sticking points in the broader context of hydroelectric

relicensing as the United States strives to implement an energy policy that is in line with the energy demands and public interest for the twenty-first century. The analysis presented here specifically addresses an unequal power dynamic in the FERC process and how that may have long-term implications for watershed communities as the nation contemplates moving forward toward an ecosystem restoration era in resource management.

What Constitutes Comprehensive Planning, and Who is in Charge?

The answer to the above question varies considerably depending upon what era one is evaluating with respect to the hydroelectric relicensing process, and whose estimation of comprehensive planning you consider as the most valid. In Chapter Two, it was noted that one of the most contentious issues in the FERC's hydroelectric relicensing process concerns which agency or agencies have the ability or are best suited to crafting a comprehensive plan for waterways development. As was previously shown, section 10 (a) of the Federal Power Act directs the FERC to license projects that are best adapted to a comprehensive plan. This portion of the FPA specifically tasks the FERC with balancing between the competing demands of commerce, water power development, protection and enhancement of wildlife, and other beneficial uses. In the early era of hydroelectric licensing, the FERC's authority under the comprehensive planning mandate went largely unchallenged. However, as was also shown in Chapter Two, this authority was significantly altered after the Environmental Era when Congress re-fashioned the FPA in 1986 by enacting the Electrical Consumer's Protection Act. This Act further

refined the FPA in by amending section 4 (e) to require that the FERC give “equal consideration” between the competing public interest demands of power/development and environment/recreation. In effect, the ECPA raised the status of the fish and wildlife agencies by requiring the FERC to give greater consideration to their recommendations for crafting a comprehensive plan for non-developmental resources including cumulative impacts of multiple projects in a single basin (for example, the Klamath Relicensing). Outside the scope of the FPA, changes in the public interest toward the environment brought forth both the National Environmental Policy Act and the Endangered Species Act. These two acts brought in a completely new era concerning FERC’s authority when considering project impacts upon relicensing. They specifically gave much greater authority to the fish and wildlife agencies to protect listed threatened and endangered species as well as define their critical habitat. The ESA has previously been criticized for its narrow focus on single species versus the much broader notion of ecosystem protection.

Chapter Three introduced a much broader notion of ecosystem restoration versus merely working toward protection of endangered species. In the Klamath Basin, this would mean placing the ecosystem on a trajectory toward restoring historical conditions. The FERC relicensing process offers an opportunity to bring to the forefront new societal values regarding ecosystem restoration. However, it was also noted that the FERC relicensing process alone is inadequate to ensure full basin-wide restoration. Dr. Lowry’s model specifically predicts that disjointed outcomes rather than comprehensive change would be a likely result in case like the Klamath relicensing. Additionally, Chapter Three

noted how the Klamath River basin has essentially been managed since 1988 by the dictates of two biological opinions, and later in 2000 by the Trinity River environmental impact statement that resulted in a record of decision for increased flows.

To undertake the process of more fully analyzing this essential tension among the competing agency mandates to implement comprehensive planning as well as among the competing demands of development, single-species protection, and ecosystem restoration goals, I conducted interviews with a mixture of tribal representatives, federal fish and wildlife agency personnel, and environmental NGO representatives. In general, the Native American tribes of the Klamath River basin have consistently stressed their desire for a more comprehensive approach to ecosystem restoration via the implementation of cultural resource management techniques. They specifically eschew the approach the federal fish and wildlife agencies have adopted, which is a focus on managing for the protection of single species.

One essential element of this thesis is an evaluation of the strengths and limitations of the FERC relicensing process. Chapter Three introduced the concept of ecosystem restoration and noted how many stakeholders in the Klamath Basin express a desire for greater ecosystem services from the river and its surrounding environment. This constitutes a significant shift in values over the Environmental Era with its focus on species-specific protection utilizing the ESA as its primary hammer. This shift will challenge the FERC to go beyond merely striking a balance between the competing demands of environment, recreation, and power production to a much broader goal of ecosystem restoration. Understanding this shift in eras makes a useful starting point for

evaluating how well the FERC is doing now, and is likely to do in the future. When asked what the best parts of the FERC relicensing process are, Randy Brown of the U.S. Fish and Wildlife Service responded:

I guess I would have to define it [best] as how you deal with the Commission relative to other federal agencies. Let's put it in that context. From that standpoint, I would say that the FERC process seems to have a lot more opportunity for give and take between the Commission and the licensee and the Service. I would say that the Commission would at least in the past with my experience, the FERC would be more than happy to stay out of an issue if the resource agencies and the licensee were able to work out a solution, they would be more than happy to rubber stamp it and call it good. (Brown, 2005)

This would suggest that paramount to crafting a comprehensive plan is the centrality of the interaction between the currently licensed operator and the agencies. This point is well supported in the literature. Specifically in the Klamath case, this interaction between the fisheries agencies and PacifiCorp would have been most critical in the early collaborative phase of the relicensing. As was noted in Chapter Three, PacifiCorp chose to utilize a modified Traditional License Procedure (TLP) with an early collaborative phase so that the agencies and the stakeholders could achieve consensus on the scientific standards to be utilized. Lowry noted how critical consensus was in achieving restoration aims by building common ground and trusting relationships early in the process.

In achieving restoration goals, the centrality of interaction between the agencies and the operator leave out one critical stakeholder population. The missing element in this scenerio is the tribes and their desire for cultural resource management. When asked

about his experience thus far in the relicensing process, Ron Reed, a cultural biologist for the Karuk Tribe, summed it up as “inadequacy.” Specifically, he stated:

The process has been inadequate. PacifiCorp/Scottish Power has been very reluctant to study the issues and concerns of not only the Karuk Tribe, but also the other tribes in the basin as well as the other federal/state agencies. So, the inadequacy is that they’ve for instance [left out] fish issues below Iron Gate Dam. There is not one study in regards to that. You know, they deemed it as the hydroelectric project had insignificant impacts to the fishery below Iron Gate Dam. Obviously, the tribal position is that those dams cut off over 350 miles of anadromous spawning habitat, rearing habitat, and things like that... You know, so the Karuk Tribe, having the holistic management philosophy that we do, feel that there have been huge impacts by the dams to the cultural resources of the tribe. (Reed, 2005)

The inadequacy of the process in terms of their perceptions that cultural resources will not be adequately protected was not the only aspect of the relicensing process the tribes related. As noted in the literature review, FERC relicensing processes can often drag on for many years. Tribal representatives often have the least prior experience with the FERC relicensing process. In fact, in no case during my interviews with them did they reveal that they had previously participated in a relicensing. On the opposite end of the spectrum were agency representatives who often had a decade or more of experience. Indeed one agency representative of the USFWS related having worked on a single FERC relicensing case for over a decade. Even though I formally requested interviews with the project managers from PacifiCorp for the Klamath relicensing, they declined, stating that the ongoing dynamic of the settlement negotiations made it too risky a prospect for them. Similarly, the FERC representative ruled out an interview based on their rules on *ex parte* communications. However, it should be safe for one to assume

that any hydroelectric utility operator would assemble a crack team of personnel thoroughly familiar with all aspects of the relicensing process and the Federal Power Act in general.

This issue of familiarity with the process highlights an unequal power dynamic in terms of where to allocate limited personnel resources and funding to attend critical meetings for the tribes. Essentially, where can they achieve the most bang for their buck? Is it more efficacious for them to participate within the process, or seek relief of their redresses by traveling to Scotland to appeal to shareholders in the parent corporation? Initially, for the Karuk Tribe at least, they felt it was in their best interest to participate as fully as they were able to in the early collaborative phase. In a basin as large as the Klamath, that often requires many hours of driving to attend frequent meetings. Summing up their dissatisfaction with this aspect of the process, Sandi Tripp who is the Director of the Karuk Tribe's Department of Natural Resources and Environmental Policy stated:

Well, our experience here is that we have put a lot of resources, staff, and financial resources into the process of interaction with PacifiCorp who is the owner of the dams or have the license on the dams...and so we have been in process with them for three years before the license application went in. We don't have the funds to do that, we aren't funded through anything to send staff to this sort of meeting process. But, at least once a week, we were in meetings for three years...which is sad, there were no impacts, they were not going to take any responsibility for any impacts below the dams and that everything that had to do with PacifiCorp stopped at Iron Gate Dam. The process that we went through before the application we were hoping that by spending time at these meetings, by sending staff to these meetings, by letting them know our opinion, by getting our voice out there that it would make a difference. What PacifiCorp put into their application, and how they would maybe deal with the mitigation measures that need to happen. In that application they would state those in

accordance with what we had verbalized to them and things through these meetings. Well, it just didn't happen and when they put that application in, I really felt like we were betrayed by them and you know big business and big money, that's the way it goes! You know I guess maybe I was a little naïve to think that they would ever care about it, but that's how it did happen. So today I'm very apprehensive about it. I don't trust them. So then shortly after that, we ended up going to Scotland because we had to demand that we were involved in the process and that the impacts below those dams, below the project was detrimentally affecting the river, the species in the river, but also the human aspect of it so they could understand that. I haven't been real happy with it at all. (Tripp, 2005)

In the future, this disparity of adequate access to the FERC relicensing process is likely to intensify under the accelerated timeline dictated by the new Integrated Licensing Process (ILP). The tribal representatives will have even less time to fully prepare for what has previously been described as a more “front-end loaded” process. The ILP will have an even greater emphasis placed upon gaining early consensus among the stakeholder participants. If violations of trust among participants or deliberate omissions of key study modeling occur in that accelerated scenario, there will be less time to mend disputes. The potential for disjointed outcomes would likely intensify. As previously noted, the achievement of early consensus is critical to obtaining fundamental restoration outcomes. This will further challenge the FERC to uphold its comprehensive planning mandate rather than simply ushering the process along on a speedier timeline.

Congress responded to the demands of society during the Environmental Era by enacting the ECPA to refine the FERC relicensing process to give more authority to the agencies in crafting a comprehensive plan. The meaning of “comprehensive” in that era was more easily slipped into a paradigm of management for threatened and endangered

single species. In the future, Congress should consider mechanisms and means to make the FERC relicensing process more inclusive of tribal concerns in a restoration era. A simple provision in the FPA for funding tribal representation through the Bureau of Indian Affairs is but one example.¹⁵ This is an especially significant disadvantage for the tribal representatives in a watershed that is as large and rurally isolated as the Klamath River. Driving forms the predominant transportation mechanism for attending meetings in the basin. Often, this can mean driving more than six hours to attend even a half-day meeting.

The FERC's own policy statement on consultation with tribes contains a provision for accepting comprehensive plans submitted to the Commission by the tribes. Notable above, however, was the Klamath tribal representatives' estimation of their own extremely low familiarity with the FERC process. It is unlikely that they will be able to craft a comprehensive plan that will be able to compete with those submitted by the operator or agencies in an adversarial proceeding. It is also unlikely that merely appointing a tribal liaison representative to the FERC staff will in any way correct this disparity. Rather than being relative policy laggards and hiding behind their rules on *ex parte* communications and the quasi-judicial nature of their proceeding, the FERC should take a cue from the EPA's more progressive policy statement on tribal relations and "place a special emphasis on building Tribal capacity to administer their own

¹⁵ See, *A Trilogy of Tribes v. FERC*. Michael C. Blumm makes a very similar recommendation stating: "FERC's approach to public participation needs to be overhauled. Most adverse effects on river resources resulting from FERC decisions are local...Congress should require that any further proceedings be conducted in local areas, direct FERC to provide funds to interveners to encourage their participation in FERC adjudications" (1986, 52).

environmental programs” (Royster & Blumm, 2002, 221). The meaning of “comprehensive” in the future is likely to shift from species-specific concerns to holistic or ecosystem-wide focus. In that regard, the tribes’ long history of empirical observation and cultural resource management philosophy will be more valuable.

Preserving the Tribal Trust and Differing Conceptions of Sovereignty

Chapter Two outlined the broad parameters of the FERC’s 2003 Policy Statement on Interaction with the tribes, and compared the relative strengths and weaknesses of the FERC’s and the Environmental Protection Agency’s differing approaches to interaction with the tribes. Chapter Three described in more detail how frustrated the Klamath Tribes were with the FERC’s approach to pursuing government-to-government consultation. Through the process of conducting interviews with both agency and tribal participants in the Klamath relicensing case, it was discovered that there exist significantly greater disparities between conceptions of tribal trust and sovereignty than expected. Clarifying this disparity is important to further refine exactly what will be the role of the relicensing process in achieving a comprehensive plan respectful of holistic notions of ecosystem restoration.

Defining exactly what constitutes preserving the tribal trust depends upon who or what agency you ask. Perhaps more important than merely defining tribal trust is asking the question of who within the FERC relicensing process is tasked with upholding it. The FERC states, “The Commission, in keeping with its trust responsibility, will assure that

tribal concerns and interests are considered whenever the Commission's actions or decisions have the potential to adversely affect Indian tribes or Indian trust resources” (“Policy Statement on Consultation with Indian tribes in Commission proceedings,” 2003). This statement by the FERC essentially places the preservation of the tribal trust on equal footing with the federal/state agency recommendations protection, mitigation, and enhancements under Section 10 (j) of the FPA. The key word here is that the FERC must “consider” them when adopting a comprehensive plan. It would appear that nothing in either the FPA nor the FERC’s own Policy Statement makes it incumbent upon the FERC to actually uphold the tribal trust.

Much of the responsibility for preserving the integrity and spirit of tribal trust in hydroelectric relicensing falls upon the federal fish and wildlife agencies in both the Departments of Commerce and Interior. In explaining their role or responsibility toward maintaining the tribal trust, John Hamilton from the USFWS Field Office in Yreka, CA articulated:

Tribal trust [means that] we through the Department of Interior and the USFWS have a responsibility to the tribes and their interests. In this situation, the tribes want to have their fish back in the Upper Basin and they want to have their fisheries restored throughout the river all the way down to the mouth. So, we have an obligation that we’re taking seriously and that is to do what we can through this process to restore those fisheries and restore healthy fish populations. (Hamilton, 2005)

In acknowledging the tribes’ desires for fisheries in the Upper Basin and extending all the way to the mouth, he is giving emphasis to what was previously noted as placing the ecosystem on a trajectory toward historical conditions. Obviously, this also describes a

desire for fundamental restoration outcomes rather than a disjointed outcome. In a similar sort of response, Randy Brown from the Arcata, CA USFWS field office explained the tribal trust as:

Well, we have some very specific policy with respect to our tribal trust responsibilities and that comes into play in the relicensing. We are definitely, and I think from the standpoint of the case of something like the Klamath where you've got trust responsibilities that are resource-based, in terms of this case the fish, we're really on the same page in terms of what our interests are in addition to the responsibility we have as a federal trustee agency. (Brown, 2005)

When asked to further clarify what he meant by "on the same page", he explained whether the USFWS visions for what need to occur in the Klamath Basin is in alignment with the tribes:

I think yes, not necessarily in the same specific ways, I think that they have some other trust issues that don't necessarily...they've got other issues besides the ones we have since we're supporting federal trust species, like anadromous fish. Our responsibility goes to either those fish and wildlife resources that have some federal trust responsibility, so we're talking about something like inter-jurisdictional fish. We don't necessarily have an issue so much or at least not it's not one of our primary issues. Our primary issues are, is there a federal involvement? Is there something that pulls us in? Is there a federally listed species? (Brown, 2005)

Based on the above statements, it appears that the federal fisheries agencies acknowledge they have some role or even a responsibility to uphold the tribal trust. However, they may be misguided to assume that they are in substantial agreement with the needs and desires of the tribes for ecosystem restoration versus management for single species. The fisheries agencies have been managing in the Klamath Basin for several decades, and first

listed the suckerfish species on the ESA in 1988. The Coho salmon followed suit in 1997 and ever since, as noted above, the basin has been managed under the biological opinions. Even with this level of scrutiny and intensive level of management, the fisheries are faced with near total collapse. The tribal, commercial, and sport-fishing industries have fallen under increasing levels of restrictions on catch totals. For the Karuk Tribe, this decline in subsistence-level fishery has been dramatically felt in a single generation. Chapter Three previously noted how Dr. Norgaard's report found the Karuk now consume less than five pounds of salmon per capita per year from a high of 450 pounds (2004, p.5). Perhaps more than any other affected community in the basin, the tribes understand the important opportunity that the FERC relicensing presents to uphold their conception of the trust responsibility of the government. Empirical evidence would certainly seem to suggest that the agencies' management philosophy has left a failed legacy.

As more Western rivers are due for relicensing in the next two decades, additional Native American tribes in other watersheds will inevitably be faced with defending their conceptions of the trust responsibility of the U.S. government toward them and their interests. At the time the Federal Power Commission granted most if not all the original license orders, American Indians had not even been granted the right to vote. When speaking with tribal representatives, the Commission and industry leaders consistently downplayed the ultimate impacts dam construction would have on the fisheries. The provision of fish passage facilities were promised in numerous cases but were never completed. For the most part, FERC relicensing represents what may be one of the first

significant opportunities for the tribes to voice their concerns about how they would like to see their watersheds managed. Congress upheld the public trust by bringing a broader societal interest in environment over development to the forefront by enacting the ECPA in the Environmental Era. Similarly, the tribal trust should be more carefully scrutinized in the restoration era. Relicensing periods can last from 30-50 years. If not done correctly, this could represent an irreplaceable or irretrievable loss of cultural resources. It is appropriate to question whether justice will be served by following the FERC relicensing process or whether justice will be denied to the tribes. Extinction of salmonid species and other tribal cultural resources upon which they rely for their spiritual practice and customary way of life will absolutely constitute an injustice to the tribes.

Several tribal stakeholders were asked to define what their conception of the tribal trust is as it related to the Klamath relicensing. The agencies and the FERC would be well served to gain a greater understanding of these responses and utilize them in forming comprehensive plans. One member of the Yurok Tribe explained his understanding of the trust responsibility as: “Basically, as a conquered people, Native Americans under American law and government...does not lose its sovereignty...when you conquer a people, you don’t extinguish their sovereignty and you have certain responsibilities in relationship to that sovereign”(Pace, 2005). He went on to describe the two mechanisms the federal government has utilized to uphold that responsibility. These are through the formation of treaties and through the establishment of reservations by Executive Orders. In explaining the significance of the formation of reservations to upholding the tribal trust, he articulated:

When the Yurok Reservation was formed, they were called the Klamath River Indians one mile on each side of the river for so many miles. It [the Executive Order] said this is for the Indians so they could fish and gather so they can do their livelihood. Well, when it mentions fishing, that established a trust responsibility to the federal government. Because they said this is where these Indians are going to have to live, and this is how we are intending for them to live on this land by fishing, they created...that created a trust responsibility on the part of the federal government to the Yurok Tribe to not do things that are going to make it impossible to live on that land in the way they were intended to live there. In terms of the Yuroks, that's the fish. (Pace, 2005)

These definitions were more general and formed a useful starting point for understanding their concerns. Other tribal stakeholders gave much more explicit responses in terms of what the relationship might mean in terms of management philosophy and how it might differ from those of the agencies. After listening to those voices, it should be clear that they are not “on the same page” as the fisheries agencies. A Karuk participant stated:

You know, I'm not sure exactly how FERC operates in the formal world as far as tribal trust. What I do know is that the federal government has a responsibility to manage with the tribal trust in mind. And so, when you're managing for the land, or the river, in regards to resources, any impacts that happen, you need to go into this tribal trust consultation phase. We feel it is necessary for the federal government to manage the resources with tribal trust in mind first and foremost, instead of the ESA being first and foremost. Basically, what I mean there is...the Karuk Tribal perception is that first in time, first in right. ... (in the basin), the ESA has been thrown out there, therefore people are attacking the ESA and trying to water it down, but the Karuk position is that even if the ESA goes away, they still need to manage with tribal trust in mind. And so, in a way the Karuk Tribe feels that maybe managing for the ESA is the wrong way to manage for tribal trust. In other words, you have a single-species management process that addresses the needs of one specific species, and the Karuk Tribe is very much involved in holistic management and believes that holistic management of all species is going to get us into recovery. Managing for the ESA is going to continue to drive us down the road to extinction. And so, I think that status quo management is not acceptable. I think tribal science, or traditional

ecological knowledge, traditional management practices, whatever or however you want to frame it, that needs to be implemented in the next management process. (Reed, 2005)

In Chapter Three, it was noted that Ms. Sandi Tripp referred to the FERC relicensing process as representing a potential “irreplaceable and irretrievable commitment of the cultural and trust resources of the Karuk people.” Other sources consistently note that the tribes constantly feel their cultural integrity is under attack and that the relicensing represents a “last hope” or “last chance” for renewal. (King, 2004, 26) When asked to explain her conception of the tribal trust in relicensing, Sandi Tripp responded:

The federal government has a trust responsibility, meaning what it took for subsistence, foods and traditional type, for instance the fish and the different species we were able to harvest. Tribal people harvested for so many centuries and centuries, when the government came here they made a trust with the tribes, saying that we will not destroy what was yours and you will still have those species. Those species won't go away. They promised that to the tribes in good faith...when they put the last dam in at Iron Gate, they said they were going to do everything they could to make sure that they would never take a species away. (Tripp, 2005)

Numerous sources in the literature review utilize terminology referring to a “tribal trust species.” This would seem to suggest that there are certain species that should have more relevance when the federal government considers its tribal trust obligations. A Yurok Tribal biologist was asked to clarify this difference between the notion of a species-specific tribal trust and the more general trust obligation of the government. He responded:

Well, to me the tribal trust species are just the resources that the federal government has the obligation to protect that happen to be fish species. In relation to endangered species, of course they are designated under the

ESA. Tribal trust species is much broader than that, because in the Klamath River, the only endangered species currently listed is the Coho salmon that the Yurok Tribe depends upon. However, the Yurok Tribe also depends upon Spring and Fall run Chinook salmon, Winter run Steelhead, Lamprey, and Green Sturgeon...all of those are tribal trust species that are important to the Yurok way of life. So, it's much broader and to me it leads to a much more ecosystem-based approach than ESA management, or single-species management, which is what I consider ESA management to be. (Hillemeier, 2005)¹⁶

Comparing and contrasting between the federal government's and the tribe's conceptions of the tribal trust tends to show one of the myriad ways in which status quo arrangements can creep into the relicensing process. Several sources cited in Chapter Two of the literature review tend to conclude that the outcome of the ECPA was substantial change to the status quo in the way FERC does business. However, the bulk of the process will always retain its major underpinnings within the framework of the dominant Western worldview. This is especially true when it comes to selecting studies utilizing the "best available science" – which may be and often are biased against more holistic tribal knowledge and experience – in order to create the terms and conditions of the new license. The FERC is more likely to defer to the other federal or state agencies with their strong mandates such as the ESA to manage for single species rather than be accepting of other worldviews such as tribal cultural resource management or traditional ecological knowledge. Of course, in each individual relicensing, partisan politics usually comes in to play in terms of how vigorously state and federal agency mandates are pursued. The new Department of Interior appeal process described in Chapter Three is but one

¹⁶ Mr. Hillemeier is currently the manager of the Yurok Tribe's Fisheries Program. In that capacity, he is a representative of the Tribe, however, he wished to make it clear that he is not a member of the Yurok Tribe.

example. By and large however, the FERC has to be alert to and clearly in line with the agencies' recommendations when they craft a comprehensive waterways management plan. If they fail to uphold those recommendations then the whole process is much more likely to result in longer more drawn out cases that ultimately end up in litigation after the decision is made.

A Changing Timeline in Relicensing, Who Wins and Who Loses

Besides the issue of who has a mandate to create a comprehensive plan for relicensing, another major element of contention in the FERC's relicensing policy has been the timeliness in obtaining a new license order. Numerous sources cited in both Chapter Two and Chapter Three of the literature review noted how several relicensing cases have drug on for a decade or more. In fact, when I interviewed Mr. Randy Brown for this Chapter, he noted that he had personally been involved in a relicensing case that had dragged on for more than a decade. Chapter Two describes how the Federal Power Act was eventually created out of ashes of the General Dam Act of 1906, which proved unable to stimulate sufficient private capital for hydroelectric development projects to serve the public interest. Furthermore, in the earliest years of the Federal Power Commission, creating a comprehensive plan for waterways development met with less resistance owing to the fact that the Commission consisted of a triumvirate of the Secretaries of War, Interior, and Agriculture. Later refinements to the FPA garnered in the present era of a shared plurality between the five-member body FERC

Commissioners and the other state and federal agencies having mandatory conditioning authorities. The competing public interest demands between cheap sources of power and environmental preservation brought forth the final major legislative amendments to the FPA in the form of the Electrical Consumer's Protection Act. Chapter Two developed a historical progression of the FERC's relicensing process to show how each era was substantially in alignment with changes in the public interest. Each era, however, brought along increasing baggage in terms of legislative hurdles to overcome in arriving at a final license order. This brought the process to the level of political quagmire. Even when new license orders are issued, the specific case is often held up in the court system to hammer out the details of the terms and conditions. The Bush Administration summarized its understanding of the hurdles hydropower faces relative to other sources of electricity generation:

The most significant challenge confronting hydropower is regulatory uncertainty regarding the federal licensing process. The process is long and burdensome, and decision-making authority is spread across a range of federal and state agencies charged with promoting different public policy goals. Reforms can improve the hydropower licensing process, ensuring better public participation, ensuring that effective fish and wildlife conditions are adopted, and providing interagency resolution before conflicting mandatory license conditions are presented. The licensing process needs both administrative and legislative reforms. (National Energy Policy Development Group, 2001, Section 1 p. 9)

In addition to its comments regarding hydropower's challenges, the task force headed by Vice-President Cheney made the following commentary regarding the future of electrical power generation in general:

One of the most important energy issues facing the Administration and Congress is electricity restructuring. The electricity industry is going through a period of dramatic change. To provide ample electricity supplies at reasonable prices, states are opening their retail markets to competition. This is the most recent step in a long transition from reliance on regulation to reliance on competitive forces. (National Energy Policy Development Group, 2001, Section 5 p. 11)

In essence, the logic of the Administration is that there exists very little opportunity from which to squeeze new efficiencies or add new hydropower capacity to the grid.

Recognizing that fact, they will seek every opportunity to improve the regulatory climate in favor of the hydropower industry, thereby improving its competitiveness relative to other sources of power.

Author Charles Sensiba noted that we are entering into “the relicensing era of river management” (1999, p.603). Indeed, out of the total FERC inventory of 1,011 hydroelectric developments, 220, or 20% will come up for relicensing in the next decade (Sensiba, 1999, p.610). The FERC has long recognized that drawn out relicensing processes are not in the national interest and began engaging in interagency task force plans to improve the process efficiency. Ultimately, this brought forth the new Integrated Licensing Process (ILP), which will become the default relicensing procedure for all future FERC hydro relicensings. In effect, the ILP aims to shave the “on the books” timeline for the entire relicensing process from five years down to a mere 18 months. In Chapter Two it was further noted that the FERC believes all future relicensings should occur within 17 months, but that there are opportunities to extract even greater efficiencies from the process (Federal Energy Regulatory Commission, 2005a).

Numerous literature sources cited in Chapter Two noted how the ILP front-end loads the process by achieving early stakeholder consensus and melds together the NEPA EIS procedures with the FERC scoping process (Robinson, 2000, ; Stavros, 2000, ; Swiger & Grant, 2004).

None of the above mentioned drives for bringing new bureaucratic efficiencies to the relicensing of a project bring watershed stakeholder communities away from the essential adversarial nature of the FERC process. In any major shift in public policy procedures, such as the transition from the traditional to the integrated licensing process, it can be assumed that there will be some parties who stand to gain and other parties who stand to lose. For its part, the FERC certainly stands to gain in reducing the burden of its anticipated high caseload of relicensings in the coming decade. Based upon the above quotations from the Cheney Task Force, it would appear that the currently licensed hydropower utility operator stands to gain substantially from decreased regulatory hurdles and renewed reliance upon market forces. Through the process of interviewing stakeholders involved in the Klamath relicensing, I sought to gain a greater understanding of how this anticipated transition might impact other parties to relicensing in general. Of course, this line of questioning was conducted with the full understanding that no licensing participant has actually utilized the ILP, because it has yet to be implemented. Instead, interviewees were asked to speculate on their perceptions of what would be an ideal timeline for completing a relicensing. Since PacifiCorp chose to utilize an early collaborative phase in the Klamath relicensing, it makes for a good case example to analyze the issue of timeliness in relicensing as the FERC contemplates moving toward

an Integrated Licensing Process. The ILP will place much greater emphasis upon early collaboration, therefore there should exist a rough correlation between the two.

Two stakeholder groups were specifically targeted for questioning regarding the issue of timeliness in relicensing. No matter which process is utilized, the agency representatives will still carry the burden of upholding their own specific mandates for conditioning new license orders. Owing to the previous analysis of the unequal power dynamic among relicensing participants, I was specifically concerned with how the tribal representatives perceived their own ability to keep pace with an accelerated timeline. Randy Brown from the Arcata USFWS Field Office was asked about an ideal timeline and how fast a relicensing could go. He responded:

Well that's a difficult one because on some of these old projects they are relicensing, you're talking about a project that has been in place for a long time. Some of the facilities for the PacifiCorp project have been around since the early 1900's, so you're talking about something that's been having an effect on fish and wildlife for a long period of time. You're also potentially talking about a 50-year license being issued at the end of this relicensing process. So, for example right now the process as I understand it is about a 5-year process. Sometimes it doesn't seem long enough. When I say long enough, you don't want to go past the end of the license period, but they should have started 15 years ago. They should have been looking at what the impacts of this project are on fish and wildlife a long time ago. I think this has happened with the Klamath, they end up submitting a draft license to the Commission that doesn't have nearly all the information in it that the resource agencies would have liked to have seen from the standpoint of being able to evaluate the effects of the project. They get started late and they end up having all these meetings, but not really producing anything as a result. You'll find that one of the things that is always in the licensees favor on these big projects is the status quo. They've got a project that's been in place for 50-plus years let's say, you've got a situation where the thing has been amortized probably along time ago, all they are doing is maintenance. The change is always going to be adverse to them in some respect. Everything that could

possibly happen at the end of this relicensing is going to be bad from a business hydro standpoint more than likely. (Brown, 2005)

This confirms what Ms. Sandi Tripp previously stated regarding competing against “big business and big money.” From the tribe’s standpoint, they felt there was going to be value added to the process by attending the early collaborative meetings and asking for study requests that supported their conceptions of holistic management. In the end however, they found that the operator stalled, delayed on, or completely disregarded study requests from other licensing participants. Chapter Two noted how President Roosevelt and the Progressive Era reformers fought hard for a relicensing provision within the FPA. They were specifically concerned that a new license order after a period of 30-50 years offered an opportunity to re-evaluate the project in light of societies changing demands and renewed evaluation of what best served the public interest.¹⁷ In this manner, industry monopolization could be forestalled and the democratic character of the process could be preserved. By allowing the currently licensed operator to stall on completing essential study requests and proper evaluations of the project’s effects on the environment until quite late in the process, the FERC unwittingly helps to maintain industry hegemony over the relicensing.

The industry position is that they like to keep their cards close to their chest in order to prevent potential competitors from gaining proprietary information too early in the process. However, since relicensing represents the most substantial evaluation of the

¹⁷ In addition, Section 10 (a) of the FPA requires the FERC to ensure that the project is best adapted to a comprehensive plan, which among other things, completely reevaluates the best use of the river resource upon license expiration.

watershed in light of new evaluations of the public interest, Mr. Brown's comments about starting the evaluation period 15 years before the end of a license deserves further evaluation by the FERC. The FERC could write into new license orders conditions requiring continuous evaluation of the project's effects throughout the lifecycle of the new 30-50 year license. This could be in the form of an agency procedural action with public comment and would not likely require a substantive Congressional overhaul of the FPA. Alternatively, Blumm finds that reason the FERC has not ordered continuous evaluation throughout the license period is that the courts have failed to force them to adhere to the ESA's consultation requirements. This inability of the courts to shape FERC's behavior is a specific weakness in the ESA. The FERC's licensed operators clearly have an ongoing impact upon the environment, which should trigger ESA consultation. The solution Blumm suggests is utilizing the citizen suit provisions of the ESA to force the courts to shape FERC's behavior (2002, 216).

Mr. John Hamilton from the Yreka USFWS Office was asked about the best and worst parts of the FERC relicensing process. He stated:

I think possibly one of the worst parts is the way the FERC does their balancing. They often pay lip service to certain conditions that resource agencies recommend for resource protections, mitigations, and enhancements. The agencies can spend a lot of time working on a Section 10(j) recommendation that they feel is very important and when it gets to the FERC decision process that the FERC will just blow those conditions...kinda blow them off. They do this in the interest of balancing, in the interest of providing a license that...will allow the company to make a profit. That's one of the worst parts I can think of. It's a very lengthy process, especially in this proceeding, I'm sure it's going to be very lengthy. (Hamilton, 2005)

What this suggests is the agencies may choose not to spend a lot of time working on specific protection, mitigation, and enhancement measures that they perceive the FERC will not ultimately accept. Mr. Hamilton was then asked a more specific question about timeliness in relicensings and whether his agency had specific resource constraints that prevent them from participating as fully as they would like to. He responded, “Well, I think it’s like any other situation. We have to triage and we have to, in other offices I’ve been in...this is the only project we’re working on in this office. But, in other situations I’ve worked in other offices, we’ve had more projects up for relicensing than we had resources to work on it” (Hamilton, 2005). I had not previously been aware that the same USFWS Field Offices that are tasked with FERC relicensings are often also working on Army Corp of Engineers, Section 404 Dredge and Fill permitting issues. When I asked Mr. Hamilton if he had any of those kinds of conflicts for his time he stated:

No, we don’t on this one. But, you’re asking the general question about resources, and in other situations we’ve had to just “no action” certain low-priority projects that had minimal impacts on fish and wildlife, we’ve had to just kind of pass on those. In this situation [the Klamath relicensing], the government is...we are continually being asked to do more with fewer personnel, and fewer staff and so that’s kind of what we’re up against. We could use more people. We could use more staff. But you know, you just gotta do what you can and go for the big stuff and the really important stuff and hope that somewhere, some place down the road you might be able to pick up additional resources. The other part of the time is that sometimes these proceedings can take in some situations decades to relicense a project. There is one project, the Cushman up in Washington that’s been on annual licenses for over 30 years. It never has been relicensed. My point is if you as a resource agency and you’ve got dedicated staff and you can stick with a project and have continuity of key people working on that project, you can really see the whole process through to the end, you can really do some very good things for the resource. (Hamilton, 2005)

Mr. Hamilton's reference to fewer personnel resources is in bureaucratic parlance known as "mission creep." One agency will become known for being highly efficient, which often prompts Congress to heap even more responsibilities upon them. They can sustain this new operational tempo for a certain period, but after awhile, they reach a breaking point and then the agency's personnel resources begin to suffer. He also makes a key point about having the personnel longevity and institutional memory in place to do good things. One disadvantage the agencies often face is frequent personnel transfers. Mr. Felice Pace was asked about timeliness in relicensings from the standpoint of his involvement as the former Conservation Director of the Klamath Forest Alliance.¹⁸ His statement helps to clarify some of the specific institutional constraints and advantages the NGO community may have relative to the agencies. He states:

Some of the smaller NGO's in particular can retain staff for long periods. I worked for the KFA for 15 years. In a way that can give you an advantage in some long processes because, the bureaucrats change. They move around a lot. So sometimes in a long process, you'll have more of the history and actually be more knowledgeable than some of the bureaucrats. On the other hand, in the narrow process it means if you've got a staff of two people, like even Chuck Bonham [Trout Unlimited] is what, three people in all of California? A condensed process is going to be very difficult for groups that don't have a lot of resources because there's going to be a lot of things happening in a very short period of time. In my circumstance, I've been there before with Forest Service projects and...you wind up not covering things because you just can't. You sort of have to do triage and decide, okay where is it likely that I'm going to be able to get some leverage and I'm going to concentrate over there. (Pace, 2005)

¹⁸ Mr. Pace was interviewed both in his capacity as the former Conservation Director of the KFA and in his capacity working with the Yurok Tribe. Some questions were directed more specifically to the NGO position in the relicensing.

This is an important observation on the role of the NGO's in the process. Often, the environmental NGO's form a block coalition in favor of restoration objectives such as fish passage or dam removal. Both the agencies and the NGO's acknowledge the necessity to utilize a form of triage in deciding where to expend their resources.

However, on a major project such as the Klamath relicensing, it is extremely unlikely that either the agencies or the NGO's will take a complete pass. They may even find enough commonality in key objectives to form a strong advocacy coalition. Chapter Three established that Lowry's model predicts disjointed restoration outcomes on highly complex relicensings with low political receptivity. One of the ways he suggests the political deadlock can be overcome is through the formation of a strong advocacy coalition favoring fundamental changes. It is not likely that the agencies and the NGO's will work in direct collusion to form policy shifts, but it is also unrealistic to expect that agency field representatives would fail to recognize and yield to the strong institutional memory of an NGO stakeholder having more than 15 years of experience in a particular watershed either.

In the previous section of this chapter, it was noted that the Karuk Tribe harbored some resentments concerning the early collaborative phase of the Klamath relicensing. This is an important concern to further evaluate in light of the FERC's adoption of the ILP with its heavier emphasis on front-end loading the collaborative phase in future relicensings. Mr. Reed from the Karuk Tribe was asked to speculate on how the tribes might fare in the ILP process. He stated:

A lot of different people in this relicensing process feel that PacifiCorp has been stalling around and not getting to the heart of the issue, and now they've stalled enough to where they kept us busy until now. We go to the FERC and the studies and information requests have been inadequately completed. So, once you go to the FERC and then they want to speed the process up, that hurts the tribes. That really hurts the tribes because now all the sudden we can't get to the heart of the issues which I've already been describing to you. In the initial stages, PacifiCorp was reluctant to study them from the beginning. Now we're just starting to study these issues, and we're in a hurry up process. We stalled around for three years and now all the sudden we have to do all these studies in the next year. (Reed, 2005)

His observation that the FERC licensed operator stalled during the initial stages of the study requests is clearly consistent with those expressed by Mr. Brown of the USFWS. Chapter Three noted how early collective decisions, especially in the area of scientific precepts must be based upon consensus for desirable restoration objectives to be met. However, if it is always in the best interest of the currently licensed operator to stall on initial study requests, then it is not at all clear how the ILP will foster early collective decisions.

When asked the same question regarding the ILP's accelerated timeline impacts on the tribes, Mr. Orcutt from the Hoopa Tribe was much more direct. He simply stated, "My personal opinion from what I've seen managing and overseeing this program here, which is probably the second largest in the basin tribal-wise, [is that] it would be harder to meet our objectives within the constricted timeframe" (Orcutt, 2005). Ms. Sandi Tripp was unaware that the FERC had published a final rule on the ILP. When I explained the proposed constricted timeline to her, she was incredulous. She stated:

Well, I think that is just a farce. The whole pre-application process that we went through was ridiculously tedious and put us into a situation where we didn't have the resources to fight them or get our voices heard...they [PacifiCorp] didn't even have a responsibility to put it in the application. So, what use is spending resources that we didn't have? We pulled monies that were really better used in our children's health that have early life-stage diabetes, and then our elders have rampant heart disease. So, I have to say that 18 months is probably not long enough for such a big decision. But, it is also ridiculous to think that we have to go through five years and just hope and pray...when we wake up and send our people and our money out to go to a FERC meeting instead of sending one of our kids to college...that it is well spent, and it hasn't been. (Tripp, 2005)

These tribal representatives' comments again reflect the disparity among the relicensing participants, not only in familiarity with the FERC process, but also in their perceived ability to keep pace with an accelerated timeline. This also ties back into the previous section on comprehensive planning. The FERC process allows for the submission of comprehensive planning alternatives by the Tribes and agencies. However, the tribes are already feeling pinched for time, and admit to actively triaging which meetings to attend and where to distribute their limited personnel resources. How likely is it in the future their planning alternatives will be as thorough and in acceptable form for submission to the FERC as those submitted by the incumbent licensee?

Clearly, it is not in the public interest for FERC relicensing cases to drag on for decades, especially if they are continually granted annual operating licenses that contradict the public trust that a new license order is supposed to represent in the first place. However, if a comprehensive basin-wide plan is the ultimate objective, then it is also not in the public interest to marginalize some relicensing stakeholder groups with a timeline so restrictive that their important policy alternatives will not be reflected in the

fullest sense. In other words, the FERC's drive toward bureaucratic efficiency may act to quiet the voice of dissent and continue the FERC down the path towards status-quo decision-making. As has been stated before, the FERC may craft an operational license order in as efficient of manner as possible, but leave in their wake torn communities that are still locked into adversarial relationships unable to carry on with the important work of restoring the ecosystem and improving their community vitality.

Summary

This chapter has utilized qualitative data analysis to offer three important findings concerning the FERC's relicensing process. One essential element of this thesis has been to evaluate the strengths and limitations of the FERC relicensing process. The analysis in this chapter offers several reasons why the FERC may not be ideally staged to propel itself into a restoration era in hydroelectric relicensing. First, if comprehensive planning is a central mandate of the FERC relicensing process, then the FERC's overtly heavy reliance upon the federal and state agencies with mandatory conditioning authority leaves out the important tribal conceptions of holistic ecosystem management in the definition of "comprehensive." Second, the FERC and the major agencies involved in the relicensing process have significantly disparate views on what constitutes the nature of tribal trust. Given that FERC relicensing orders are from 30-50 years, this may lead to an

“irreplaceable and irretrievable commitment of the cultural and trust resources.”¹⁹ The FERC must transcend the narrow confines of managing for the ESA and realize that it would gain value from re-evaluating its own Policy Statement on Consultation with Indian Tribes and adopting a more progressive stance such as the one offered by the EPA. Finally, the FERC’s drive toward bureaucratic efficiency in adopting the ILP as the default relicensing process may further marginalize some relicensing participants relative to that of the incumbent operator. The Klamath case has shown that early collaborative discussions in the modified TLP were highly unsatisfactory to tribal participants in the relicensing. Early collaboration, especially in the area of consensus on scientific precepts, is essential for obtaining fundamental restoration outcomes. With its greater emphasis in front-end loading the process through even greater early collaboration absent an order for continuous evaluation periods throughout the lifetime of a license order, the FERC’s new ILP process may make disjointed outcomes more likely in the future.

¹⁹ This particular terminology was used by Ms. Sandi Tripp of the Karuk Tribe. However, it should be noted that this terminology was also used in the Ninth Circuit court’s decision in the *Confederated Tribes & Bands of the Yakima Indian Nation v. FERC* (1984) case.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

Conclusion

Fundamentally, this thesis is about communities and the impact a policy process has on their future way of life. It is a rare day when the federal government issues forth a decision with such wide-ranging direct consequences on communities and their quality of life for a period lasting up to 50 years. For some Native American communities, FERC relicensing decisions may result in an irreversible and irretrievable commitment of their cultural and trust resources. The FERC possesses powers granted to them in the Federal Power Act other federal agencies do not have. The foundation of this unfettered authority stems from the federal government's exclusive ability to regulate interstate commerce. In the earliest history of the United States, this translated to ensuring unobstructed navigability, which was essentially synonymous with commerce. Today, this power concerns the FERC's ability to grant a single corporation the right to conduct business in a watershed where the valuation of their "product" is highly contested.

A historical presentation of the literature review was used to highlight how changing conceptions of what lies in the public interest evaluation of our rivers and watersheds has shifted from a predominantly development era to a to a modern era focused more on preservation and restoration of the resource. A single policy instrument suitable in the former may be wholly inappropriate in the latter. The Federal Power Act

was designed in an era in which rapid private capital investment in the development of hydropower was felt to be necessary for the economic expansion of the nation.

Watersheds and the suitable building sites for hydroelectric power production often overlap multiple political jurisdictions. The unavoidable conflicts of interest between those jurisdictions necessitated the granting of power to a highly centralized federal decision-making body. A key focus of this decision-making body has always been how to develop a comprehensive plan for waterways development and who has the authority to do so.

The original Federal Water Power Act of 1920 vested this central authority in a three-member commission consisting of the Secretaries of War, Commerce, and Agriculture. Each possessed an unchallenged authority to license hydropower developments in their own respective reservations. As such, none of the attendant conflicts of interest that exist among the various branches of government in today's relicensing proceedings was present then. The FWPA transitioned to the present-day form of the Federal Power Act in 1930 and its five-member independent commission. This era also signaled a much broader shift from the earliest history of primarily military control of our waterways to greater control being vested in the Congress. Over the years, owing to shifts in the public interest, the Congress began conditioning the FERC's unchallenged authority to craft comprehensive plans for waterways development by allowing a greater degree of agency plurality in decision-making. The Traditional Licensing Process came to be known as highly adversarial in nature and typically led to status-quo decisions in favor of the development interests in waterways management.

The Progressive Era policy reforms established fixed license terms to prevent monopoly control of a public resource. This era also established relicensing as the primary mechanism to assure public interest re-evaluation of the dominant beneficial uses of our nation's waterways.

The Environmental Era policy reforms such as the Clean Water Act, National Environmental Policy Act, and the Endangered Species Act signaled a much broader transition from a primary public interest in development of public resources to preservation of the environment. However, these reforms challenged the FERC's ability to craft comprehensive plans without the input from various other federal and state agencies. Navigating the complicated sets of regulatory hurdles brought much delay in achieving FERC relicensing decisions. The Congress recognized the FERC was granting substantially status-quo decisions irrespective of the public interest shift from development to environmental preservation. Thus, the final major conditioning to FERC's relicensing process occurred when the Congress passed the Electrical Consumer's Protection Act in 1986.

The ECPA removed a public utility preference in granting new license orders, but it also modified the FPA by creating the largest single piece of legislative shift in the balance of powers between the agencies involved in hydroelectric relicensing processes. Specifically, this Act modified Section 4 (e) by requiring that the FERC give "equal consideration" to the needs of development to with the competing needs of energy conservation, protection mitigation and enhancement of fish and wildlife, recreational values, and preserving other environmental values. A review of the literature suggests

the ECPA did achieve the desired result of modifying the FERC's behavior over status-quo, but it also led to an increase in the adversarial nature of relicensing proceedings as well as escalating some relicensings to the level of political quagmire.

For its part, the FERC issued several of its own decisions beginning in 1994 with the consideration of dam decommissioning as an alternative in relicensing. This was in addition to federal government's authority to take over a project when it remained in the public interest. The Edwards Dam decommissioning demonstrated that the FERC could utilize the tents of the ECPA to order removal of a dam when the public interest in environmental preservation and restoration exceeded the development values of a particular project. The FERC recognized that unnecessary regulatory delay in crafting comprehensive plans and achieving satisfactory relicensing decisions was decreasing hydropower's competitiveness relative to other sources of power. To help overcome this trend and deal with an overwhelming volume of relicensing decisions due in the next decade, the FERC also codified an Alternative Licensing Process in 1997 and ultimately an Integrated Licensing Process, which is now the default. The FERC sought to achieve greater bureaucratic efficiency by reducing the timeline in relicensing from five years to only 17 months. The primary mechanism for improving efficiency rests with harmonizing the scoping process with NEPA review process. This requires a much greater degree of early collaboration among the stakeholders involved in relicensing. So called "front-end loading" of the process is intended to achieve early consensus between the relicensing participants and result in much less adversarial proceedings. Finally, in 2003, the FERC issued a new policy statement on consultation with Indian Tribes in

relicensing proceedings. This policy outlines how the FERC should interact with another sovereign entity to ensure is both respecting government-to-government consultation requirements and preserving the tribal trust. The FERC will also consider comprehensive plans submitted to it by tribal governments or their representatives. However, the FERC qualified its acknowledgement of those responsibilities due to the limitations imposed by the quasi-judicial nature of its proceedings as well as the rules on ex-parte communications between relicensing participants.

The Klamath River hydroelectric relicensing case provides an excellent lens to analyze the issues because it will challenge the FERC and all other relicensing participants to the fullest extent possible. The presence of an already highly polarized and adversarial relationship existing between the upstream and downstream communities as well as a highly complex ecosystem traversing multiple intransigent political jurisdictions makes the likelihood of fundamental restoration outcomes seem unlikely. A predictive model proposed by Dr. Lowry finds that unless a broad coalition advocating for change sufficient to overcome political divisiveness forms, disjointed outcomes in achieving restoration objectives are the likely result. However, nearly all parties involved in the Klamath River relicensing process recognize that status-quo management has unacceptably led to ecosystem deterioration and concomitant declines in their way of life. The salmonid species in particular face near certain extirpation unless radical policy shifts consider all available means to achieving restoration success. In short, the Klamath will challenge the FERC's ability to give equal consideration required in the ECPA to both the needs of development and those of resource protection when it contemplates the

crafting of a comprehensive plan for the next 30 to 50 years. The eyes of the nation are focused on the outcome of the Klamath relicensing. Will it lead to a substantially status-quo decision favoring the pro-industry and development lobby that seeks to retain hydropower as a relatively “cheap” source of power? Alternatively, will it lead to greater collaboration among the relicensing participants possibly considering holistic notions of ecosystem recovery that are not rooted in the dominant Western worldview?

Hydropower development and the FERC relicensing process have undergone significant changes owing to shifts in the dominant public interest for the beneficial use of public waterways. The needs of an expanding economy called for a highly centralized and pervasive decision-making authority to preserve the core functions of the State. Dams were once considered ecologically benign objects. This is no longer the case. Watershed ecosystems throughout the country are in decline. Restoration is increasingly seen as a means to achieve economically viable communities and preserve traditional cultural ways of life. Whether the FERC and its relicensing process will be staged to enter this new era in riverine management, and the reasons why it may not be, constitute an important research question.

This thesis focused on the above question by evaluating the strengths and limits of the FERC relicensing process in three key areas. These three focus areas have historically been sticking points in previous relicensing decisions. Without a critical evaluation of how these areas are impacting watershed communities, the way forward in relicensing will likely continue to be murky and plagued with disjointed outcomes. First, the comprehensive planning mandate required by the FPA was evaluated in light of how

the ECPA shifted the balance of power toward the federal fisheries agencies. Second, the FERC's consideration of preserving the tribal trust and their conceptions of sovereignty were compared with those of tribal representatives. Finally, the issue of timeliness in obtaining relicensing decisions was evaluated with consideration of who is likely to win or lose when the FERC significantly compresses the timeline utilizing the ILP.

Recommendations

The FERC relicensing process constitutes a critical component in placing watershed ecosystems on a trajectory toward restoring historical conditions. To achieve this objective, comprehensive planning must mean much more than simple preservation of endangered species. Status-quo and the dominant worldview in managing ecosystems are driving us down the road toward extinction. In the future, the FERC's evaluation of comprehensive planning must be more inclusive of tribal conceptions of holistic management. The FERC should take a cue from the EPA's more progressive stance on building tribal capacity. Rather than simply installing a Tribal Liaison Representative as an ombudsman to the process, the FERC should focus on how it can improve the opportunities for tribes to submit their own comprehensive plans. Once submitted, those plans should be given due weight in comparison with those submitted by the licensed operator and the agencies.

It seemed obvious from the prefacing statements made by tribal representatives during the government-to-government consultations between the Klamath Tribes and the FERC that the FERC was not being sensitive to tribal notions of sovereignty. Interviews

conducted with tribal participants in the Klamath relicensing confirmed that there were disparities between tribal, the FERC, and agency conceptions of tribal trust and sovereignty. This is amazing when one considers that the Congress came close to requiring the Federal Power Commission to obtain tribal consent for projects affecting their lands. At a minimum, the FERC should consider further refining their rules on ex-parte communications to ensure the government-to-government consultation process is held in private rather than being open public forums.

A compressed timeline in relicensing from five years to only 17 months will have much greater potential for significantly disadvantaging certain participants in the process. The success of the ILP will hinge upon early collaboration and achieving scientific consensus. In a large watershed such as the Klamath Basin, this will require frequent driving over long distances to attend critical meetings with other stakeholders. Personnel shortages and budgetary constraints imposed upon the agencies, the tribes, and the NGO environmental participants in particular will challenge their ability to keep pace with the tight deadlines imposed by the ILP. To ensure all parties have an equal position at the table, the FERC should obtain and distribute grant funding to those stakeholders exhibiting limited resources.

Finally, the FERC cannot wait until the expiration of a license order to begin the process of evaluating project impacts. The FERC should consider incentives that will induce the currently licensed operator to undergo a continuous evaluation process in concert with the federal and state agencies throughout the lifecycle of the 30-50 year license.

This thesis was focused on watershed communities and the impact the FERC relicensing process has on them. Dr. Kari Norgaard's report on the health consequences of an altered diet for the Karuk Tribe brings to light new evidence that hydroelectric dams are threatening the cultural integrity of the traditional tribal way of life. Further research should build upon Dr. Norgaard's findings and more directly consider the case of environmental justice in the FERC relicensing process.

Post Script Analysis

Because this thesis utilized an ongoing policy process in the Klamath hydroelectric relicensing as a case example and focus of analysis, it was necessary to delimit the work to a fixed point in time. The FERC receives numerous submittals from the stakeholders and agencies involved as well as publishing its own issuances on a weekly basis. It would simply not be feasible to track all these ongoing correspondences and provide meaningful analysis for a graduate level thesis. For the purposes of this research, December 2005 was chosen as the delimiting point for case analysis. This date corresponds with the point at which the FERC should have issued its Ready for Environmental Analysis (REA) document.

Since that time, closed-door negotiations continue. It is impossible to predict what the outcome of a negotiated settlement might be, but a recent document submitted to the FERC by the federal fish and wildlife agencies may shed new light on Lowry's predictive model for policy changes. Chapter Three evaluated Lowry's model and found that the Klamath relicensing should result in disjointed outcomes due to the high physical

complexity of the ecosystem and low political receptivity to change over the status quo. The formation of a broad coalition advocating for fundamental shifts may create momentum sufficient to break through political deadlock.

On March 29, 2006, the NMFS and the USFWS issued and submitted to the FERC their combined comment, recommended terms and conditions, and preliminary prescriptions for the Klamath Hydroelectric Project. In the Executive Summary, they found that the PacifiCorp's project "is responsible for ongoing detrimental impacts to many important Klamath River fish populations and limits options for watershed restoration" (McGinnis, 2006, p. A 4). Using Section 10 (a) of the FPA, the federal fishery agencies recommended removal of the four lower main stem dams on the Klamath River as their preferred alternative. They conclude that this would offer the best opportunity to reintroduce fish species to their historical habitat. This is a stunning conclusion considering the degree of influence the Bush administration has had on the environment by creating a favorable policy climate for business and development interests. However, this conclusion alone would likely have minimal impact on the FERC's relicensing decision because recommendations given under Section 10 (a) are but one among the many competing factors the FERC must "consider" when crafting its comprehensive plan.

On the other hand, Section 18 of the FPA is the real hammer in the FERC relicensing process. Rather than recommendations, it consists of mandatory prescribed terms and conditions, which tie the FERC's hands when evaluating the cost/benefit ratio in their relicensing decision. In the same submittal to the FERC, the NMFS and the

USFWS, submitted their “preliminary Section 18 prescription with the presumption that the existing Project facilities may remain in place throughout the new license term. Should this be the case, it is imperative that fully volitional fishways are satisfactorily designed and implemented as a means to achieve our basic resource goals and objectives”(McGinnis, 2006, p. A 4). Nowhere in the submission to the FERC do they recommend trap and haul as an alternative method. In laymen’s terms, this means that should PacifiCorp chose to accept a new license from the FERC they will have no option but to install costly fish ladders for both upstream and downstream passage of both adult and juvenile stages of all fish species to their historic range. The Condit Dam relicensing already demonstrated how this action by the fisheries agencies forced PacifiCorp to consider dam removal as an alternative to accepting a new FERC license.

The environmental NGO position has always been that dam removal may be the most cost-effective solution for achieving restoration objectives in the Klamath Basin. The California State Energy Commission found that full dam decommissioning may offer the best cost/benefit solution in trading off a relatively low value source of power production to a high potential for restoration objectives. Both Oregon and California are likely to require tough Section 401 Clean Water Act requirements on the renewed license. Of course, the tribal communities throughout the basin consider dam removal to be their number one objective for the long-term health of the ecosystem. The Klamath Water User’s Association now realizes they will never be able to re-negotiate the 1956 contract for below market power rates. The Pacific Fisheries Management Council severely restricted all commercial, tribal, and recreational fisheries in the Klamath Management

Zone. The Governors of both Oregon and California granted disaster relief assistance funding. All of the above should suggest a fundamental shift in public opinion regarding receptivity to change. Now that the federal fisheries agencies have thrown their weight behind fundamental changes as well, it should signal the formation of a strong advocacy coalition sufficient to break through political deadlock and lead to a change in status quo.

It should be noted however, that fisheries agencies' recommendations are only preliminary in nature and subject to change if new evidence is presented. Additionally, with the new provisions of the 2005 Energy Bill, which allow the operator an opportunity to appeal before a trial-type hearing the mandatory prescriptions to the Secretary of the DOI, it could ultimately result in disjointed outcomes, as PacifiCorp has requested an evaluation of trap and haul as an alternative to fish passage requirements. They specifically state:

Both KlamRAS and EDT modeling data confirm the viability of collection and transport under Project conditions as a preferable method of fish passage. There are risks associated with passage of fish through the Project, and uncertainties regarding successful reintroduction due to poor habitat and water quality conditions above the Project. Installation of ladders is a particularly risky choice of fish passage methods under Project conditions. (PacifiCorp, 2006b, 28)

The analysis of trap and haul in Chapter Three already dismissed it as a viable option for the Klamath due to its absolute failure on the Snake River and other factors unique to the Klamath Basin. PacifiCorp's appeal should constitute one of the first, if not the first ever, attempts to overturn agency prescriptions in a FERC hydroelectric relicensing case. As such, it is impossible to predict what the likely outcome may be. As noted previously in

Chapter Three, it certainly has the potential for changing the dynamic of the whole FERC relicensing process and shifting the balance of power to the private utility operator.

Assuming that the Secretary of the DOI upholds the mandatory Section 18 fishway prescriptions, it should induce PacifiCorp to revisit the negotiating table and firmly place dam removal as a high priority option for achieving the desired restoration objectives in the basin. Since a national dam decommissioning fund has not been established, it is likely PacifiCorp and the other stakeholders will be keen to seek some other source of public subsidy to aid in dam removal and restoration efforts.

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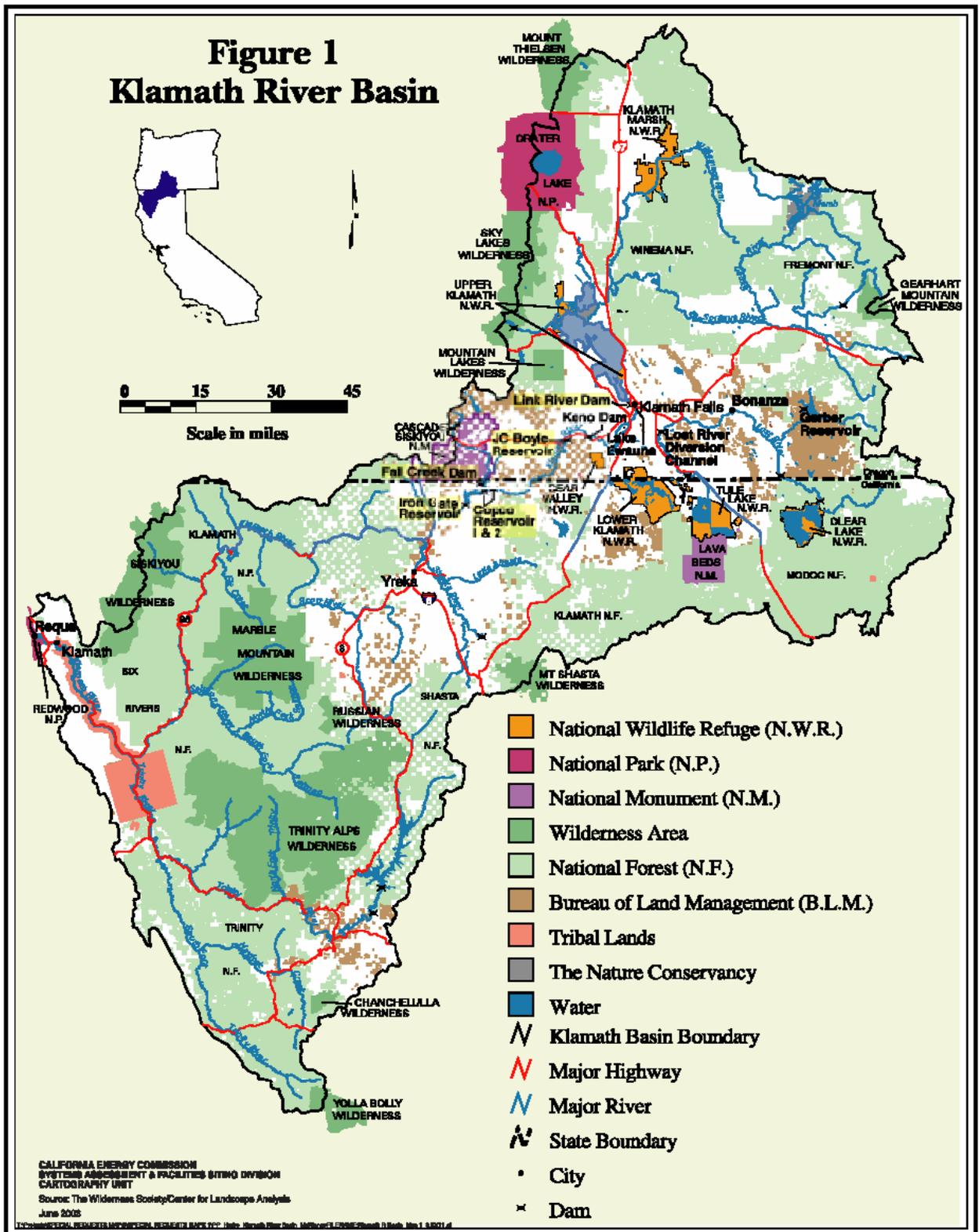
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APPENDIX A

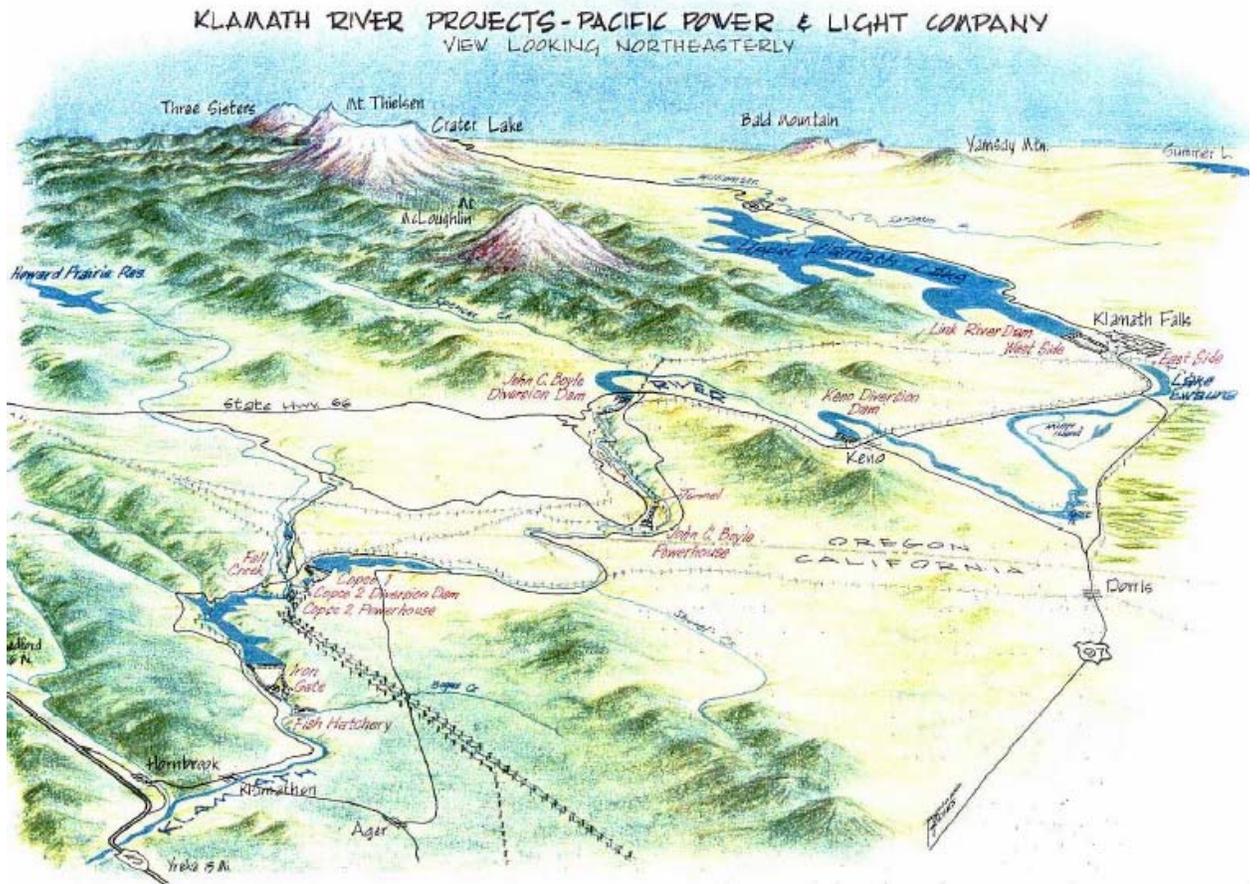
Map of the Klamath Basin

**Figure 1
Klamath River Basin**



APPENDIX B

Schematic of PacifiCorp's Klamath Hydroelectric Project



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