THE ROOTS OF IMPASSE: HOW NEOLIBERALISM HAS SHAPED RECOVERY PLANNING FOR ENDANGERED FISH IN THE COLUMBIA RIVER BASIN

A THESIS

Presented to

The Faculty of the Environmental Department

The Colorado College

In Partial Fulfillment of the Requirements for the Degree

Bachelor of Arts in Environmental Policy

By

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May 2017

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Acknowledgments

I would like to sincerely thank the many people who helped me through the process of researching and writing this thesis. This project would not have been possible without my thesis advisors, Eric Perramond and Corina McKendry, who collectively spent many hours with me, helping me refine and develop the concepts in this paper and providing feedback through the whole process. I would also like to thank the many people who participated in my research and agreed to be interviewed for this project, especially. My understanding of the concepts presented here was fundamentally informed by these personal communications, and I am very grateful for the time and knowledge that these individuals have shared with me. Finally, I would like to thank the Colorado College and the numerous faculty members who have made my journey over the past four years possible. This thesis is a culmination not only of my independent research over the past year but of the skill, knowledge, and experience I have developed with the help of professors, advisors, and mentors during my time here.

Introduction

Management of the Columbia River has come to an impasse: after decades of litigation and controversy, there is a growing sense among stakeholders that there may be no good solution to the conflict between salmon and hydropower. Over fifty-six dams have been constructed in the Columbia Basin for purposes of generating hydropower electricity (Figure 1), which comprises about fifty percent of all electricity used in the Pacific Northwest today (Northwest Council). Throughout the construction of this remarkable system, environmental concerns, such as the dams' impact on migratory

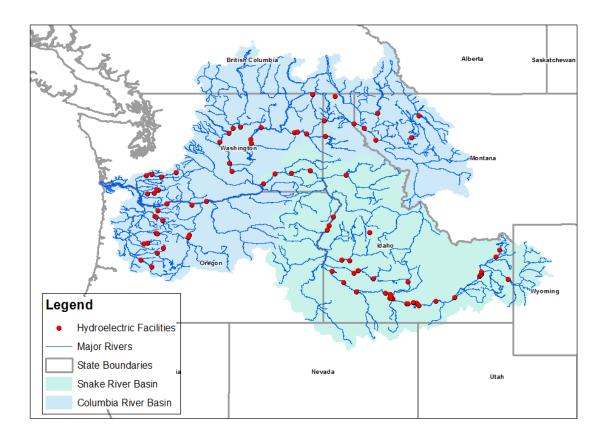


Figure 1: Map of the Columbia and Snake River basins, showing hydroelectric facilities

salmon, were largely ignored. According to one estimate, eighty percent of declines in salmon populations in the Columbia River Basin can be attributed to the construction and operation of hydroelectric dams (Blumm and Paulsen 2013). Although today, salmon are protected under the Endangered Species Act of 1973, restoring their populations in this altered river system has proved challenging and controversial. River management strategies to benefit the fish often require operational changes that reduce the productivity of hydroelectric power generators, and thus they are strongly opposed by hydroelectric interests and dam operators. Still, the National Marine Fisheries Service, the agency charged with ensuring that other federal agencies' actions (including actions of federal dam operators) do not jeopardize listed species, is constantly pressured by Native American tribes, environmental groups, and other stakeholders to implement just that sort of management plan. Caught between the two sides, the NMFS, instead of being decisive, has tended to avoid upsetting the status quo and has been often criticized for it. For instance, Blumm and Paulsen accuse the agency of showing "persistent unwillingness to significantly change hydroelectric operations" (2013, 89), and over twenty years ago, Judge Marsh of the Oregon District Court claimed that "instead of looking for what can be done to protect the species from jeopardy, NMFS and the action agencies have narrowly focused their attention on what the establishment is capable of handling with minimal disruption" (Idaho Department of Fish and Game v. National Service Marine Fisheries). Because the agency has failed to vary their management approach in recent decades, their action does nothing to break the current management impasse and has likely perpetuated it.

In this report, I suggest that this "persistent unwillingness" can be explained to a significant degree by the politicized state of the environment within which the NMFS works. Despite their authority under what is considered to be one of the nation's strongest environmental laws, the Endangered Species Act, they must operate within the confines of what is not only economically and practically feasible but more importantly, politically feasible. I analyze how a pervasive ideological trend in U.S. economics and politics, the development of neoliberalism, has subtly constrained the ESA's power with the effect of reducing the NMFS's authority over other agencies and affecting the political feasibility of dramatic protections for listed species. For example, neoliberal policies aimed at limiting federal involvement in economic activities and private land under the ESA have become impediments to federal action in the Columbia that would give endangered fish priority over development activities that threaten their survival. Two such policies are analyzed in this report, the "no surprises" policy, which was originally designed for private landowners but is now used between regulating and regulated agencies, and the "best available science" mandate for federal action under the ESA. These policies influence the feasibility of endangered fish recovery initiatives by (respectively) reducing the NMFS's regulatory power over other agencies and limiting their ability to take precautionary or experimental action to improve current recovery strategies. Understanding NMFS decision-making from this perspective is essential to understanding why the agency has failed to break the impasse, as well as to developing better approaches to the future management of the Columbia River.

Parts I of this report provides a brief overview of the ESA. Parts II and III lay the groundwork for understanding the impact of neoliberalism on decision-making under the

ESA today. Part II gives a brief overview of neoliberalism and discusses broadly its implications for federal regulation. Partly in response to collapse of New Deal policies and other top-heavy federal regulations being implemented in the 1960s and 1970s, neoliberalism changed the way that the country saw the federal government's relationship with the market and the private individual. This new theory proved later to be a challenge to the ESA, which some were beginning to see as an overreach of federal power. Part III examines the qualities of the ESA which made it so unfavorable to neoliberals by following the Act's evolution from 1978 through the 1990s. Part IV looks at the collision of the ESA with neoliberal trends, and how the federal government reacted to increasing hostility toward the act. In its attempts to pacify critics, the Act was amended in a number of important ways and specific guidelines were set for its implementation, especially during periods of distinct neoliberal reform. These changes included enforcement of the best available science mandate and the origin of the no-surprises policy. Part V looks at how the Supreme Court addressed neoliberal concerns related to the ESA during this time. Because of the Supreme Court's important role in setting legal precedent, it was very influential in deciding how the ESA was to be interpreted and implemented in practice and through a series of important cases, the Court solidified the best available science mandate and limited the federal government's power under a piece of legislation many feared was becoming too powerful. Finally, Part VI describes the process of developing a recovery plan for a specific population of fish in the Snake River, a major tributary of the Columbia. It shows how the legacy of neoliberalism is still relevant for decision-makers in the NMFS today, and how their actions are limited by the precedent

through the Supreme Court decisions discussed in part V and amendments made to the act during periods of neoliberal reform.

Part I: Provisions of the ESA

The primary purpose of the Endangered Species Act (ESA) is twofold: first, to protect listed species and their essential habitat such that the species are kept from extinction, and second, to bring about their recovery such that they no longer need to be protected under the act. The act is enforced by the Fish and Wildlife Service (FWS) under the Department of the Interior and the National Marine Fisheries Service (NMFS) under the Department of Commerce. The FWS manages all listed species except for anadromous fishes (fish that migrate between the ocean and freshwater streams, such as salmon and steelhead), which are managed under the NMFS. The following section provides a brief overview of the act's provisions most applicable to Western river management and an introduction to their significance to recovery planning. This is not a comprehensive overview of the act or any of its sections, and is meant to serve only as background for understanding the following analysis.

Section 4 of the ESA ("Determination of endangered species and threatened species") outlines the fundamental process of listing species. Species may be listed for a variety of reasons, including "natural and manmade factors affecting its continued existence" (16 U.S.C. § 4(e)(1)). Species can either be listed as endangered (that is, its populations have become so minimal that the species is in danger of becoming extinct) or

threatened (at high risk for becoming endangered). Threatened and endangered species are herein referred to collectively as "listed species." Importantly, subsection 4(f) also requires the federal government to develop recovery plans for listed species. This subsection alone carries the *recovery* part of the act's purpose. It includes information which must be incorporated into each plan, including "a description of site-specific management actions that may be necessary to achieve the plan's goal for the conservation and survival of the species" and "objective, measurable criteria which, when met, would result in a determination... that the species be removed from the list," as well as estimates of how much carrying out those actions would cost in time and money. Despite its importance to the purpose of the ESA, section 4 recovery provisions carry little regulatory clout. Recovery plans instead are voluntary, nonbinding documents that by nature require the cooperation of all actors involved if they are to be effective (Rosemary Furfey, NMFS Regional Salmon Recovery Coordinator, personal communication, July 2017). As Patlis writes, "recovery is thus the heart and soul of the Act. It is not, however, the muscle" (1996, 57). The "muscle" of the act is contained in Section 7 and Section 9 regulatory provisions.

Often quoted, section 7 ("Federal Agency Actions and Consultations") of the ESA requires that federal agencies "insure that any action authorized, funded, or carried out by such agency... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat." This provision is legally binding. Section 7 also requires that federal agencies (called "action agencies," if they are the ones carrying out an action in question) "consult" with the FWS or NMFS before carrying out any action that may jeopardize an

endangered species. In the consultation process, the FWS or NMFS reviews the proposed action and issues a written "biological opinion" determining whether or not the action would jeopardize a species or "result in the adverse modification" of their habitat. If affirmative, they may also describe "reasonable and prudent alternatives" that would offset the impact of the proposed project (for example, the action agency may be able to make habitat improvements to offset the negative effect of their project on a species). While section 7 consultations do require agencies to pay much greater attention to how their actions impact listed species, most consultation processes result in the determination of reasonable and prudent alternatives, and projects that have undergone consultation are rarely, if ever, halted due to the presence of an endangered species (Gosnell 2001, Corn et al. 2012).

Section 9 ("Prohibited acts") has proven to be one of the most far-reaching and influential pieces of the ESA. It makes it illegal for *any person*, not just federal agencies, to "take" a listed species. "Take" is defined in Section 3 as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." Like section 7, the provisions of section 9 are legally binding, and have been instrumental in efforts to achieve greater protection of species and their habitats, including citizen suits. Section 11(g) ("Citizen suits") allows citizens of the U.S. to bring lawsuits against "any person, including the United States and any other governmental instrumentality or agency... who is alleged to be in violation of any provision of this act." Throughout its history, the ESA has been largely enforced through citizen suits and the courts, setting it apart from many other federal laws which are enforced by government agents or officers of the law.

Part II: Neoliberalism and the Evolution of Governance

Environmental policy does not and has never existed in a vacuum. U.S. policies regulating human interactions with the environment, such as the ESA, interact with other parallel policies and policy trends which can allow them to either be widely embraced and enforced liberally or contested and difficult to enforce. One such trend which dramatically influenced how and where the ESA could be applied is neoliberalism. While most often associated with *laissez-faire* and free-market economic reform, neoliberalism is a broad term. Harvey (2005), sees neoliberalism foremost as "a theory of political economic practice that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade" as well as a means by which class relationships are intentionally enforced (Harvey 2005, 2). Yet many would probably also agree with Grewal and Purdy (2014) who "gladly acknowledge that neoliberalism is not conceptually neat and cannot be defined by a set of necessary and sufficient conditions for its use." Neoliberalism is not isolated only to strict economics, but rather it is associated with "far-reaching programs of state restructuring and rescaling across a wide range of national and local contexts" (Peck and Tickell2002, 380). For my purposes here, I focus on neoliberalism's association with distrust of government intervention, emphasis on economic growth and strong private property rights, and the contraction of command-and-control regulation (Igoe and Brockington

2007; Fletcher 2010; Peck and Tickell 2002). These notions are especially relevant to the endangered species act.

Neoliberalism originated as just a fringe concept in the 1940s in response to concerns that extensions of government power were threatening personal freedom. It was largely focused in a small group called the Mont Pelerin Society (formed in 1947), which favors the free-market approach and strong protection of private property (Harvey 2005, 19-20). But it wasn't until the late 1970s that neoliberalism emerged in the United States and transformed from a theoretical concept to a state-sponsored project. This timing had important implications for the interaction of neoliberalism with environmental policy, which was also in its early developmental stages.

Citing Harris and Milkis (1996), Wilson writes "often overlooked in the longrunning debate over the ESA are the act's origins in the era of social regulation that
produced the National Environmental Policy Act, Clean Air Act, Clean Water Act, and
Occupational Safety and Health Act. This era of social regulation extended dramatically
the scope and reach of the federal regulatory state" (162). This "deepening" of regulatory
reform was brought about largely in response to rising inflation and unemployment in the
wake of the collapse of Roosevelt's New Deal policies (Harvey 2005, 12-13). Yet the
1970s still saw many turbulent years of economic crisis, and many blamed these
interventionist, Keynesian economic policies that had prevailed since the New Deal (Peck
and Tickell 2002, 388). Tensions between the "social democracy and central planning"
advocates and emerging support for corporate and market freedom (a key component of
early neoliberal theory) began to conflict, and with the unravelling of the economy the

latter group was gaining influence by the mid-1970s (Harvey 2005, 13-14). Not long after the regulatory era of the 1960s and 1970s, deregulation became a popular topic.

Until 1979, the Carter administration had only "shifted uneasily toward deregulation" in the wake of the 1970s economic crisis. The late 1970s, though, brought more dramatic change. In October of 1979, Paul Volcker, chairman of the Federal Reserve Bank under Carter, instituted dramatic changes to current monetary policy. In a complete reversal from New Deal policies that had favored full employment, Volcker's policies attacked inflation at the expense of employment. The dramatic turnaround came to be known as the Volcker shock (Harvey 2005, 23).

Following the Volcker Shock, Ronald Regan's election in 1980 was a critical point in the history of neoliberal reform. Volcker was quickly reappointed to his old position under the new administration, and Reagan spearheaded a "campaign against big government" in an era of de-regulation and reform (Harvey 2005, 25). This marked the beginning of a significant transition in the political agenda in the U.S., after which deregulation became priority. It is to this time period that the emergence of neoliberalism is usually attributed in the United States (Harvey 2005, 39; Peck and Tickell2002, 388). For instance, in Executive Order 12291, Reagan demanded that economic impact analysis be conducted ahead of all new federal rules and regulations, including the listing of endangered species (Greenwald et al. in Goble 2005, 56). This action shows that the administration was concerned with minimizing the impact of federal actions on economic activities, consistent with neoliberal pressures.

The election of President Clinton in 1994 brought another, wave of neoliberal reform. In 1996, describing the sentiments of this era, Thompson (1996, viii) writes:

...virtually everyone now agrees that our historical command-and-control approach is inefficient and inadequate by itself to carry us to where we still need to go. Even those who credit our prior environmental successes to this approach concede that it has been costly. As economists and a handful of legal experts have been telling us for decades, the detailed, unrefined, and inflexible rules intrinsic to a command-and-control system have often squandered our scarce societal resources to achieve marginal environmental gains. Money spent to comply with some regulatory rules could have generated far greater environmental gain if our laws had permitted industry itself to decide how best to achieve particular outcomes rather than dictating specific processes and equipment.

In short, the country's approach to regulation was being reevaluated, with potentially dramatic implications for environmental regulation. Laws such as the ESA that relied heavily on top-down federal action for their enforcement and implementation were easy targets in an atmosphere that increasingly favored decentralization of power and the freedom of economic activity. The ESA's origins alone, though, cannot explain why it became a primary concern of reformers in the 19900s. Rather, it was subsequent events which occurred since the Act's enactment in 1973 that had the greatest impact on its reputation. These events showed that the ESA gave the government tremendous authority over private land and economic activity wherever an endangered species was found (and the list was growing), and that it could be used to halt or curtail economic projects regardless of economic impact. A discussion of the ESA's development from its

beginning is therefore necessary to understand why it became a target for reform, and consequently to understanding how those reforms continue to influence its implementation today.

Part III: Early Application and Growth of the ESA

When signing the Endangered Species Act (ESA) on December 28th, 1973, Richard Nixon issued a short statement, saying, "this legislation provides the Federal Government with needed authority to protect an irreplaceable part of our natural heritage" (The American Presidency Project). Ironically, the extent of federal authority under the act has since become one of its most controversial qualities. Since the potential of the ESA to regulate economic activities was first realized in the 1978 Supreme Court case *Tennessee Valley Authority v. Hill*, many began to question whether it gave the government only the "needed authority," or substantially more than that when it came to regulating private interests. Thus, it resonated poorly with the neoliberal mentality, and beginning in the late 1970s (around the same time that neoliberal theories were gaining traction in U.S. policy), a series of events demonstrating the potential reach of the ESA further aggravated concerns.

The first of these events was the ESA's famous Supreme Court debut in 1978, Tennessee Valley Authority (TVA) v. Hill. While today it is often cited as a positive example of the ESA's strength by those who call for stronger protections for species, at the time it sparked fears that the ESA might be a significant obstacle to economic

development. The case started with a lawsuit brought against the Tennessee Valley Authority about a dam that was under construction on the grounds that it would have jeopardized the last remaining population of a small fish called the snail darter and thereby violated the ESA. The case was complicated by the fact that the dam was already well on its way to being completed. A District Court had previously heard the case, and ruled to allow completion of the dam on the basis that Congress could not have possibly intended the ESA to halt projects that were already mostly completed, emphasizing both that Congress had funded the project and that construction of it had begun prior to enactment of the ESA in 1973. The case was then heard by the Court of Appeals, which found that the completeness of the project should have no bearing on a decision where a project clearly jeopardizes an endangered species. Finally, after attempts to relocate the population of endangered fish were attempted and were unsuccessful, the case went to the Supreme Court (437 U.S. 153 (1978)). The driving questions became whether the dam operators (the Tennessee Valley Authority) would be taking illegal action under the ESA by completing the dam, and if the court could halt a project of such significant economic benefits as the Tellico Dam, especially considering that construction was already well underway (437 U.S. 153 1978; Ruhl 2012, 497-498).

The Supreme Court ruled against completion of the dam, an opinion that simultaneously made the ESA one of the nation's most effective environmental laws as well as one of its most controversial. Chief Justice Burger delivered the majority opinion, ruling that section 7 of the ESA commands "all federal agencies 'to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence' of an endangered species." The Court ruled that indeed the dam would be illegal under the

ESA, and that *regardless of economic losses*, the dam could not be completed (437 U.S. 153 (1978), cited in Ruhl 2012, 497-8). This statement that the ESA allowed no consideration for economic costs and benefits established the act as an "economically insensitive statute" (Blumm, Thorson and Smith 2008, 709) and raised fears that the ESA had too much power over valuable economic activities. Indeed, both Chief Justice Burger as well as Justice Powell, who wrote the dissenting opinion, agreed that implementation of the ESA as interpreted in this case would come at the cost of other values. Burger wrote:

"It may seem curious to some that the survival of a relatively small number of three-inch fish among all the countless millions of species extant would require the permanent halting of a virtually completed dam for which Congress has expended more than \$100 million... We conclude, however, that the explicit provisions of the Endangered Species Act require precisely that result.

"Concededly, this view of the Act will produce results requiring the sacrifice of the anticipated benefits of the project and of many millions of dollars in public funds. But examination of the language, history, and structure of the legislation under review here indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities" (437 U.S. 135 at 173-4).

Though Powell argued, contrary to the majority opinion, that Congress could not have indented that such an "absurd result" be produced by the act, he recognized, similar

to Burger, that "this decision casts a long shadow over the operation of even the most important projects, serving vital needs of society and national defense, whenever it is determined that continued operation would threaten extinction of an endangered species or its habitat" (437 U.S. 153 (1978) at 196). In other words, implementing the ESA would come at economic and societal costs. As those costs were realized in subsequent years, the Act grew increasingly unpopular, especially from a neoliberal perspective that prioritized private rights and free-market economic growth.

After TVA, the next events to raise concerns about the impact of the ESA happened as people simply began to use and more widely apply the legislation. First, the scope of the act was shown to be much wider than originally thought as species listed under the act began to multiply. Some argue that prior to this, the ESA initially appeared to be just a localized regulation. Though powerful, it seemed that the act applied only here and there, to "one creek, one spring, one cave, one valley" (Plater 2004, 291). This changed, however, beginning with an explosion of citizen petitions to list additional species. In a period of twenty years, from 1975 to 1995, the number of listed species more than quadrupled (Ruhl 2012, 518). Necessarily, the geographic influence of the ESA also expanded (Ruhl 2012, 518). Whenever a species is listed, protections are given not just to the plant or animal but to its critical habitat as well. The consequence, as Ruhl (2012, 518) writes, "was to expand the ESA's reach far throughout the nation as the 'one creek' feature multiplied to such an extent that there was a potential 'one creek' problem around every corner." Worse, many species were being discovered on private land, increasing the regulatory burden on private landowners.

Whereas TVA illustrated that actions directly funded or carried out by federal agencies were to be regulated under the ESA, it had not addressed how federally authorized actions carried out by private landowners were to be addressed. Actions authorized by federal agencies included those permitted under other legislation enacted in the 1970s environmental era, such as the Clean Air Act and Clean Water Act, which require federally-issued permits for the release of pollutants. Many recipients of such permits were private landowners. When those permits were approved, the "authorized by" clause of Section 7 was triggered, and the federal government was required to regulate the permit-holder's actions to ensure that would not negatively impact endangered species. This transformation was taken by some to be an assault on private property rights by the federal government.

As this brief history shows, through the late 1970s into the 1990s, the ESA developed in ways that fostered resistance in an increasingly neoliberal environment. At a time when many believed that the power of the federal government over economic activities and private land should be curtailed, the ESA was doing just the opposite. Thus, it was met with increasing hostility on an administrative level and in the Court, as shown by the political and judicial response to the Act's expansion.

Part IV: Neoliberal Response to ESA Expansion

Actors becoming more sensitive to neoliberal concerns in the 1970s-1990s included the Supreme Court, Federal government, and private landowners who didn't

want the government meddling in their activities. A series of congressional as well as Supreme Court actions revealed this trend, the consequence of which was to produce several amendments and court rulings resulting in significant, cumulative changes to the ESA. In particular, the ESA's power over valuable economic activities was diminished, and mechanisms were provided to give private property owners more protections.

Congress was fast to act on the TVA decision. The expansion of the ESA in terms of its impacts on private property owners and economic activities did not go unnoticed, especially since the trend of neoliberalism was growing. Congress seemed to think that a powerful act with a tendency to conflict with major economic projects wasn't what the country needed. Their first attack on the ESA's supremacy came nearly immediately after the Supreme Court issued its ruling in TVA. In the same year, both the House and the Senate moved to allow the Tellico dam project to proceed despite the Court's ruling, proposing a set of amendments that would significantly alter the ESA. Although the most extreme of these recommendations (including the removal of Section 7, which commands federal agencies to ensure that their actions no not harm listed species and requires agencies to go through a cumbersome consultation process with the Secretary of the Interior or Secretary of Commerce before executing any action which may impact listed species) were not accepted by Congress, the amendments they did introduce added some flexibility into the act as well as a process by which projects such as the Tellico dam could apply for exemption from the ESA. (Ruhl 2012).

Some of the biggest changes to the ESA came during the Clinton Administration.

At this time, the ESA had generated heated debate, and was up for reauthorization by

Congress in 1993¹. It was thus a period during which the ESA was more susceptible to significant changes. Wilson describes a hostile environment in which "the new Republican majority, sympathetic to claims that the ESA hindered economic development and infringed on the rights of property owners, proposed a number of changes to the act." The most extensive plan included giving more consideration to impacts on economic activities and private property rights, providing compensation to landowners who lost money or property under the ESA, making it easier to petition for the delisting of species, and narrowing the definition of "harm" under the ESA to mean only actual physical injury to a member of a listed species (instead of causing population declines, impacting critical habitat, etc.) (2001, 165).

While this exact proposal (the Endangered Species Conservation and Management Act of 1995) was never passed into legislation, it served as the basis for a report released a year later by the Clinton administration. It also indicated that the Clinton administration was responsive to republicans' concerns over the ESA. The Administration sought "a fair, cooperative, and scientifically sound approach to improving the endangered species act." Such was the title of a document submitted by Secretary of the Interior Bruce Babbitt to a congressional hearing in 1995. Notably, the document stated that "the Administration recognizes that implementation of the ESA should be improved by building stronger partnerships with states, local governments, private industry, and individuals; by exercising greater administrative flexibility to minimize socio-economic effects and assure fair treatment for landowners; and by

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¹ As stated by Buck et al., "the authorization for spending under the ESA expired on October 1, 1992. The prohibitions and requirements of the ESA remain in force, even in the absence of an authorization, and funds have been appropriated to implement the administrative provisions of the ESA in each subsequent fiscal year" (2012).

reducing delay and uncertainty for States, local governments, private industry, and individuals." Clinton and Babbitt sought "win-win" outcomes for the environment and private interests in their regulatory changes, and made distinct efforts to move away from traditional command-and-control governance (Ruhl 2004). To that end, the administration outlined a package of reforms, titled "ten principles for federal endangered species act policy." These principles included "base ESA decisions on sound and objective science" and "minimize social and economic impacts" (Bear 1996, 3). As shown later in the case study discussion, these two principles would continue to have a legacy in ESA implementation much beyond the Clinton administration.

A near cousin to this report outlining these ten principles was introduced by the Clinton Administration in 1997, and received broad bipartisan support. Titled the Endangered Species Recovery Act, its purpose was to reauthorize the act, and it included a mandate for timetables for recovery plans with the goal to delist more species, focused on state government involvement in recover planning, and emphasized inclusion of cost-effective and economically sensitive recovery strategies. Nonetheless, the legislation was never passed into law, attributable to "the rushed and somewhat contentions end of the 105th Congress" (Wilson 2001, 166).²

With the failure of Congressional action, the Clinton Administration sought a more creative approach to ESA reform. Secretary of the Interior Bruce Babbitt was instrumental in developing these reforms. Consistent with the neoliberal outcomes that were increasingly in demand from Republicans, he aimed to give property owners a stronger voice and more security without compromising environmental protection. His

 2 The ESA has remained unauthorized ever since, though its provisions remain intact. See Ibid., 1.

solution was a rejuvenation of a provision added to the ESA in the 1982 amendments but seldom used since called Habitat Conservation Plans (HCPs) (Ruhl 2004, 430). As stated in a 1994 Department of the Interior (DOI) news release titled, "Administration's new assurance policy tells landowners: 'No Surprises' in endangered species planning," the policy was intended "to give more economic certainty to landowners involved in reconciling endangered species conservation with land use development." The policy stated that if an endangered species was found on a private landowner's property and they agreed to a habitat conservation plan (HCP) in compliance with the ESA, and they adhere to that plan, they "will not be subject to later demands for a larger land or financial commitment... even if the needs of the species changes" (DOI 1994).

Because he was able to stave off the most vicious of attacks on the ESA, maintain protections for species already in place, and provide a workable solution to landowners that pacified some of their concerns, Babbitt's actions have been praised for their innovation (Ruhl 2004). As HCPs became more popular, though, the system began to show unintended consequences. While HCPs did afford landowners more flexibility, they further extended the reach of federal authority under the ESA by expanding the number of HCPs in existence and accompanying incidental take premise. A similar expansion of federal reach had already happened once with the increase in species listed between 1978 and 1982. Because of this, Babbitt's use of HCPs did not resolve the issues that generated the most controversy under the ESA.

Part V: The Supreme Court and the ESA

At the same time as the federal government was attempting to tackle the growing challenges of maintaining the ESA, the Supreme Court as well seemed to be favoring more neoliberal outcomes, at least in many cases. As both Ruhl (2012) and Lazarus (2000) observe, in its decisions regarding the ESA and the environment more broadly after the 1970s, the Supreme Court appears increasingly hostile toward environmental causes. But instead of hostility toward environmental causes, these authors suggest that the root of the court's reasoning is more related to government and the enforcement of regulation, regardless of environmental impacts. As Lazarus writes, the Court seems to lack a distinct opinion on the environment, and does not see environmental law as being distinct in its implications from other types of court cases (Lazarus 2000, 37). Rather, "they perceive environmental law... as merely an incidental factual context, in which environmental concerns are at stake, but there is nothing uniquely environmental about the legal issues being raised" (Lazarus 2000, 706). Ruhl suggests that the court was more concerned with regulation of private property rights. When the ESA began to do just that, the Court reacted with hostility. The following cases are evidence of this trend.

Lujan v. Defenders of Wildlife (1992) was the first in a series of court decisions in which the Supreme Court began to slowly but surely eviscerate the strong language and ambitious provisions set out in Hill (Ruhl 2012). Thus, in Lujan, the court took its first stab at the legislation by emphasizing what is required for groups to have standing to sue under the ESA. Not unique to the ESA, plaintiffs are required to demonstrate that they have been "injured" in some way by the actions of the defendants in order for them to be

able to – or, in other words, have standing" - to bring a lawsuit. In this case, environmental groups had challenged a rule made by the NMFS and FWS that limited the scope of the requirement for Section 7 interagency consultation under the ESA to federal actions within the U.S. only. Previously, a 1978 rule had extended the scope of section 7 consultation under to also apply to federal actions in foreign nations. Environmental groups challenged that Section 7 of the ESA should apply to federal actions anywhere, and that the 1978 rule should be reinstated. After debate in lower courts, the Supreme Court ruled that the environmental groups had failed to provide evidence of how they would be directly "injured" by the agencies' 1986 interpretation of Section 7. Environmental groups' had showed concern for harm to species or ecosystems as a result of the decrease in the ESA's scope, but it was concluded that this concern did not constitute "concrete" injury to the groups themselves resulting from the federal agencies' decision not to apply section 7 of the ESA internationally (Ruhl 2012, 499-500; 504 U.S. 555 (1992) at 581). In short, the rest of their claims against the agencies were dismissed because the court determined that the environmental groups hadn't showed why they had standing to sue.

A major implication of this ruling had less to do with the ESA's use internationally and more to do with the future of lawsuits brought against it. In determining that agencies' decisions about how to interpret section 7 did not cause injury to environmental groups concerned about the impacts of such decisions, the Court essentially deemed section 7 consultation procedures as "a black box shielded from public scrutiny" (Ruhl 2012, 500). This meant that, even if the NMFS or FWS did not properly conduct their review of other agencies' actions in the consultation process,

environmental groups did not necessarily have the standing to sue. They could still bring lawsuits for most other violations of the ESA (citizen suits have been a major enforcement mechanism under the ESA, even after *Lujan*), such as harm to a species, but not strictly based on the process of interagency consultation. This ruling contrasts other federal legislation such as the National Environmental Policy Act (NEPA), under which citizens can bring suits if the government fails to correctly follow the procedure. As Ruhl writes, the case solidified that "the consultation between the action-taking agency and the FWS or NMFS is not the kind of procedure in which third parties have any direct participation rights that could be injured should the agencies disregard or improperly conduct the procedure" (2011, 500).

In 1995, the court further restricted the applicability of the ESA in *Babbitt v*.

Sweet Home Chapter, Communities for a Great Oregon. The ruling determined that there had to be a direct causal connection between harm to a species and an action for it to qualify as a "take" of that species. In some cases, such as habitat destruction, proving direct causality is difficult (Ruhl 2012, 501-2). For instance, while one might be able to show with population data that numbers of a species began to decline when a certain habitat disturbance occurred, that data does not necessarily prove that the habitat disturbance – and not an unrelated event – caused the population decline. As a result, it became more difficult to prove that a particular human action caused harm to a species, and therefore that it should be made illegal under the ESA.

The 1997 case, *Bennett v. Spear*, clearly showed that the court was becoming more hostile toward the ESA and more sensitive to private property rights. It also had a lasting impact on the future of ESA implementation. In this case, ranchers brought suit

against the federal government on grounds that the FWS had failed to use the "best available science" in their decisions. This provision had never been used in court to contradict the power of the ESA, and lower courts had claimed that the ranchers did not have standing to sue against the ESA. After all, the purpose of the ESA was to protect listed species against human activities that harmed them, and it seemed counterproductive to allow perpetrators of those activities which the ESA is supposed to prevent to claim injury and sue the federal government. Thus, prior to this case, standing had not been extended to include parties representing economic interests that may be harmed by carrying out the act. The Supreme Court, though, showing clear bias toward the protection of private property rights and economic activities, reversed. They thereby expanded the notion of standing to encompass "any person," including economic interests harmed by the act, had standing to sue. In addition, the Court also confronted the scope of the legislation directly by strictly enforcing the "best available science" mandate "to ensure that ESA not be implemented haphazardly, on the basis of speculation...to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives" (520 U.S. 154 (1997) at 177-8). This unanimous court opinion was a clear departure from the sentiments of TVA v. Hill and the "at any cost" concept of species protection (Ruhl 2012, 504).

In both this case and in the previous ruling in *Lujan v*. Defenders, the Supreme Court used the issue of standing to restrain the ESA, but in different ways. In *Lujan v*. *Defenders*, the court made it more difficult for environmental groups to prove standing with regard to section 7 consultation, thereby limiting their ability to attack agencies' application of the ESA and demand more stringent application of the act. In contrast, in

Bennett v. Spear, the court used standing to open the ESA to attack from those who favored economic growth and private property rights over strong federal species protections. Furthermore, though the "best available science" mandate was nothing new in the ESA, Bennett v. Spear gave it power. The terminology actually dates back to the 1982 Congressional amendments (Corn et al. 2012, 17-18). The "best available science" mandate also comes up in the designation of critical habitat (though economic considerations are allowed here), and especially in the consultation process. In the consultation process, everything must be scientifically supported (Corn et al. 2012, 22-24). If an agency fails to do so, they may be susceptible to litigation, often in the form of citizen suits, which have been important to ESA implementation (Ruhl 2012, 496).

Fully a decade after *Bennett v. Spear*, the Supreme Court again took up the ESA in the 2007 case *National Association of Homebuilders v. Defenders of Wildlife*. The most significant outcome of *Defenders* was the ruling that the ESA applies only to discretionary agency actions, marking a full turnaround since the ruling in *TVA v. Hill*, in which the court so famously upheld the strictly applied to *all* federal actions (Ruhl 2012, 505). Discretionary actions, while not explicitly defined in the ESA, are distinguished from nondiscretionary actions, which are actions which agencies are specifically directed to carry out under a separate statute (Davison 2006, 31).

As these cases showed, TVA, rather than setting a new precedent, turned out to be an outlier in Supreme Court decision-making which instead leaned considerably toward deregulation and weakening of centralized laws (Court 2003, 29-31). Plater observed that the surprising victory of TVA is likely because the ESA was viewed differently at the time than other major environmental legislation passes in the 1970s. The Clean Air Act

and Clean Water Act, for example, were distinctly command-and-control regimes, marked by broad geographic scope and heavy government regulation and requirements imposed on private land owners and developers. The ESA, on the other hand, seemed to apply primarily to federal actions instead of private landowners, and instead of blanketing the entire geography of the nation with mandates, it could only be applied to the immediate critical habitat in which endangered species were found (the "one creek" idea). Furthermore, its implementation relied heavily on public action in the form of citizen suits, lawsuits against the government by private citizens, instead of the government imposing unwanted control over its subjects (Plater 2004, 290-291). Only after the ESA's transition to a much more expansive piece of legislation did the court begin to take a more unfavorable stance.

ESA implementation today rests on this long history of controversy. Federal agencies charged with its administration must acknowledge and be wary of the qualities of the Act which made it so unpopular throughout the 1980s and 1990s and a focal point of Clinton's ESA reforms. These qualities were those that conflicted most with the increasingly popular theory of neoliberalism, especially the tendency to conflict with private property and economic activities and to extend the reach of the federal government. The following section considers a modern case of ESA implementation, and analyzes specifically how the ESA's controversial past has changed how federal agencies approach their responsibilities under the act today.

Part VI: Snake River Recovery Planning

As a result of neoliberal influences on the ESA, illustrated by federal and Supreme Court action throughout the 1980s and 1990s, the NMFS operating in the Columbia River Basin faces pressure to use the power of the ESA very conservatively against economic interests. This is a challenging task in a region where protection of endangered fish, namely salmon, isn't just a political mandate, it's a cultural and economic necessity for many people. As the central actor in this controversy, the NMFS has persistently avoided leaning too far toward one side or the other, instead focusing on actions that aid endangered species as much as possible without requiring significant modification to the status quo (Blumm and Paulsen 2013). On one side are critics who claim that the federal government has fallen short on its attempts to uphold the ESA, or worse, that it has deliberately tended to favor the status quo of hydroelectric operation (Rebecca Miles, Nez Perce Executive Director, personal communication, July 2016; Blumm et al. 2006). On the other, powerful hydroelectric interests protect the operation of hydroelectric dams which have long been economically important to the region. After years of persisting conflict, advocates for the salmon want to know why the federal government cannot simply mandate significant changes to the hydroelectric system which would almost certainly help fish populations recover. This behavior can best be explained in the context of the extensive history of the ESA and its interaction with neoliberalism. This history has produced certain practices and expectations to which the NMFS must hold or risk litigation.

While there are many facets of salmon protection and recovery in the Columbia River Basin which could be discussed in relation to neoliberalism, this paper focuses specifically on the development of the most recent fish recovery plan released for the Columbia River Basin, the 2016 Snake River Spring and Summer Chinook and Steelhead Recovery Plan. Section 4 of the ESA requires that the NMFS develop recovery plans for all listed species, and the 2016 Snake River Plan was the last to be completed in the Columbia River Basin (Rosemary Furfey, NMFS Regional Salmon Recovery Coordinator, personal communication, July 2016). Unlike mandates under the ESA that focus on avoiding jeopardy and harm to listed species, recovery plans are by definition not legally binding (NMFS 2016), and are instead intended to serve more as a "roadmap to recovery" (Rosemary Furfey, NMFS Regional Salmon Recovery Coordinator, personal communication, July 2016). While NMFS provides the map, it's up to other agencies and stakeholders to follow it, and they will not follow something that they didn't like. As a consequence, development of recovery plans is a process negotiated among agencies and other stakeholders in such a way as to maximize the likelihood of cooperation between parties. This includes steps to make the recovery plans less harmful to economic interests, a clear reflection of neoliberalism's strong legacy in ESA implementation.

This paper analyses the importance of the ESA in the Snake (and more broadly, the Columbia) River Basin, then focuses specifically on two limiting factors to its use, the "no surprises" policy and the "best available science" criterion. These practices are pSupreme Court ruling in *Bennett v. Spear*, both of which were prompted (as discussed in previous sections) by the growing influence of neoliberalism. This report is not intended

to be a comprehensive overview of the challenges of salmon protection and recovery in the basin, as such a discussion would require a whole paper in itself.

The Columbia River used to host some of the world's largest runs of salmon, fish that are now listed as threatened or endangered under the ESA. Today, it hosts an impressive hydroelectric system, but as many argue, at the expense of the native fish. Salmon are anadromous, meaning that they migrate between salty ocean waters for their adult life to lay their eggs in high freshwater streams (Figure 2). This migratory pattern is essential to their survival. Newly-hatched salmon must have clean, cold, moving water to swim in during their first few days of life, meaning that adults must travel many miles up-stream from the ocean where they spend their lives to find a suitable place to lay their eggs. Because of salmon's migratory nature, hydroelectric dams, which often completely block passage up or down stream, have proved to be severely problematic for the fish. Starting in the early 1900s, salmon populations began to decline substantially, coinciding with a rise in the number of large hydroelectric dams constructed along the Columbia River and its tributaries. While habitat loss and degradation, as well as other factors, have contributed to declines in salmon populations as well, hydroelectric dams are known to have particularly significant impacts such as blocking migration routes, increasing water temperature, and contributing to pollution.

Currently, seventeen populations (officially called "evolutionary significant units" or ESUs, or "distinct population segments," DPSs) of salmon are listed under the ESA as either endangered (at high risk for going extinct) or threatened (at high risk for becoming endangered). Most were listed between 1993 and 2005 (NMFS 2016) after their

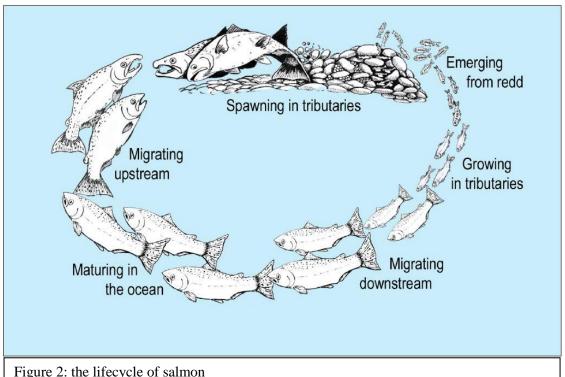


Figure 2: the lifecycle of salmon

Source: CRITFC

populations had already declined to dangerously low levels. Hydroelectric operations, on the other hand, are flourishing. Because of its unique topography – wide valleys, large rivers, steep, but not too steep – the Columbia River Basin is extremely well suited for the construction of large dams capable of generating tremendous amounts of electricity (Northwest Power & Conservation Council 2008). Today, more than half of all electricity in the Pacific Northwest is generated by hydroelectric dams (this amounts to about 44% of the nation's hydropower generation as a whole in 2012 (EIA 2014)), and residents of

the state of Washington enjoy some of the lowest electricity prices in the country (EIA 2016).

Mitigating the impacts that hydroelectric dams have had on salmon is complicated by the fact that many of the largest dams in the Columbia basin were built during the 1930s and to a lesser degree the 19440s, and predate any legislation that sought to protect and improve salmon populations. For example, the impressive Grand Coulee Dam (Figure 3), the largest hydroelectric dam in the basin and one of the largest in the world, began generating electricity in 1941 (Northwest Power & Planning Council 2008). This means that they were constructed without any regard to fish passage (a requirement



Figure 3: Grand Coulee Dam Source: author's personal photograph

added much later), and that today, they seem to be insurmountable barriers to salmon recovery. For that reason, some have pressed for removal of smaller dams in the basin, such as four dams on the Lower Snake River.

Unlike in other tributaries of the Columbia, there has been much discussion about the possibility of the removal of four dams on the Lower Snake River, mostly among tribes, stakeholders, and scholars. As University of Idaho Law Professor Barbara Cosens explained, the reason that the Snake River dams have received more attention is mostly

because they don't produce quite as much electricity as other dams in the basin (personal communication, July 2016). While other dams in the basin have similar impacts on fish, the Snake River dams may simply be easier targets for removal. The case for their removal is strengthened by the suggestion of some scientists that recovery of salmon in the Snake River is not feasible without the removal of those dams (Robert Anderson, University of Washington Law Professor, personal communication, July 2016; James Holt, Nez Perce Water Resources Division, personal communication, July 2016). Nonetheless, there are significant political barriers that have prevented the federal government from even seriously discussing dam removal as an option, and earlier attempts to place blame on dams in recovery plans have sparked outcry from water users that led to revision of the plan (Rosemary Furfey, personal communication, July 2016). Thus, in development of the 2016 Snake River plan, dam removal has been touched on only very lightly.

The plight of the salmon is extremely concerning to many in the Pacific Northwest because of the important role that they have played in the culture and economy of different peoples in the region. Salmon fishing was once a significant driver of economic activity, though it has been substantially limited since the introduction of the ESA. More salient in the current debate is the cultural, spiritual, and economic importance of salmon to the many Native American tribes residing in the Columbia River Basin. Their reverence for salmon goes much deeper than the practical uses for the fish. In the words of Federal Indian Law Practitioner and scholar Bruce Didesch, tribes' fundamental spiritual and cultural connection to salmon is "stronger than you or I could imagine." It is rooted in their story of Creation (CRITFC 2014):

When the Creator was preparing to bring humans onto the earth, He called a grand council of all the animal people, plant people, and everything else... He asked each one to give a gift to the humans—a gift to help them survive, since humans were pitiful and would die without help. The first to come forward was Salmon. He gave the humans his body for food. The second to give a gift was Water. She promised to be the home to the salmon. After that, everyone else gave the humans a gift, but it was special that the first to give their gifts were Salmon and Water.

Though many tribes have become displaced from their traditional hunting and fishing grounds along the banks of the Columbia, salmon remains a sacred food and irreplaceable part of their culture. It has motivated tribes to play a very active role in the conflict between salmon and hydropower. As James Holt from the Nez Perce Water Resource Division described, the tribe's special cultural relationship with salmon puts them in a unique position to fight for their protection. Additionally, some tribes hold fishing rights in parts of the river through treaties with the U.S. government, and argue that these rights are meaningless if there aren't any fish for them to catch.³ Rebecca Miles, Executive Director of the Nez Perce Tribe said, "the pendulum starts to swing in the history of salmon when tribes get involved" (personal communication, July 2016).

³ Prior to the listing of most of the Columbia Basin's salmon under the ESA in the early 1990s, tribes had used these rights as leverage to fight for stronger federal action to protect the fish. Unfortunately, some tribes feel that their treaty rights are in themselves fragile, and after the listing of salmon under the ESA, they have often preferred to base legal action under that legislation instead of their treaty rights (Christine Golightly, CRITFC policy analyst, personal communication, July 2016).

Tribes have been so influential in salmon protection and recovery operations that Rosemary Furfey, Regional Salmon Recovery Coordinator with the NMFS, even went so far as to say that hatcheries owned and operated by the Nez Perce tribe have kept at least one species from going extinct (personal communication, July 2016).

Despite taking criticism for appearing too soft on hydroelectric operations, the NMFS has not been able escape the influence neoliberalism and has been limited in what they can do for purposes of conservation anywhere that their actions conflict with economic activities (specifically the operation of hydroelectric dams), private property rights, or could be interpreted as an unnecessary extension or overreach of federal authority. For example, to mitigate the impact of dams on salmon, the predominate



Figure 4: Fish ladder located on the Hood River in Oregon, allowing salmon passage around a small obstruction in the main channel of the river. Water flows down the channel, but its flow is slowed by the concrete barriers. Such structures can help fish navigate smaller obstacles but are often not feasible options for allowing passage around larger dams.

Source: author's personal photograph

approach taken by the NMFS has been to focus on habitat improvements, hatchery operations, and artificial transport around dams (such as using tanker trucks to move young fish past large dams, and constructing structures called fish ladders to allow fish to swim around smaller dams; see Figure 4). In focusing on these strategies, which are clearly intended to avoid economic impacts on hydroelectric operations, the NMFS has received a great deal of criticism. Tribes such as the Nez Perce along with environmental groups have repeatedly called on the NMFS to mandate significant changes to the hydroelectric system, such as increasing the flow of water over the dams to aid salmon migration or in some cases, removing certain dams altogether, but claim that NMFS has been avoiding taking aggressive action. For instance, Earthjustice, an environmental nonprofit active in lawsuits against the federal government, has claimed that the agency "has ignored science and its legal responsibilities under the Endangered Species Act" and has been avoiding making significant alterations to the status quo (Earthjustice 2016). Similarly, Rebecca Miles, Executive Director of the Nez Perce Tribe (many members of which have been vocal critics of the government's efforts to protect salmon) has also accused the NMFS of siding with hydroelectric interests and avoiding mandating changes to the hydroelectric system that could reduce fish mortality and help populations recover. She has complained that the "Big Four," NMFS, Bureau of Reclamation, Army Corps of Engineers, and BPA were "all in bed together," and that the NMFS's decisions regarding endangered fish management were being influenced by hydroelectric interests. What was required under the ESA shouldn't be negotiable, she argued, but the process had become a negotiation (personal communication, July 2016).

From the perspective of the NMFS, taking direct action against hydroelectric operations is not so straightforward as critics would make it sound. As the primary decision-makers in the conflict, the NMFS more than any other party must be keenly aware of the political context of their actions. Specifically, the history of ESA implementation since the rise of neoliberalism in the federal government and supreme court has set a precedent for prioritization of economic growth and private property rights over conservation. The result of this history has been to limit the power of the NMFS with regard to what it can ask or demand of other agencies and stakeholders with regards to recovery planning.

As mentioned above, recovery planning under the ESA is a non-regulatory, but nonetheless important, tenet of achieving the ESA's goal of recovering species such that they no longer need federal protection. Like other aspects of the ESA, recovery planning also has the ability to become very controversial. Because of the volatile nature of the ESA, the NMFS in the Snake River Basin has been very careful to develop its recovery plans in such a way as to minimize the likelihood of conflict and litigation. The following discussion of the "no surprises" policy and "best available science" standard show two ways in which the NMFS has sought to accomplish this. Both clearly reflect neoliberal philosophy in that they both, directly or otherwise, result in the prioritization of economic interests over drastic action to conserve and recover endangered species.

The "no surprises" policy has become the standard for communication between the NMFS and other agencies in the course of developing recovery plans for listed species of fish in the Snake River. It means that NMFS will not include anything in their final recovery documents that has not been internally reviewed by the agencies involved

(Rosemary Furfey, personal communication, July 2016). This policy actually dates back to the Clinton administration's ESA reforms, though originally it does not appear that it was intended to apply to communication between agencies. Instead, Secretary of the Interior Babbitt's HCP initiative used the language to describe assurances to private landowners (cite page in paper where this is discussed?). This was a significant element of Clinton's neoliberal reforms which focused on giving private property owners and economic interests more consideration under the ESA. Today, this remnant of earlier neoliberal reforms still serves the purpose of allowing those who would have to alter their economic activities under the ESA more certainty that they will not be asked to do anything beyond actions they agreed upon. The only difference is that, instead of private landowners, it is now federal agencies benefitting from this policy. Thus, so long as the Bureau of Reclamation, Army Corps of Engineers, and Bonneville Power Association are allowed to review and comment on recovery plans before they are released and agreed upon, recommendations such as dam removal or significant, profit-reducing alterations to the hydroelectric system likely will not be found in the final reports. The no surprises policy therefore works to perpetuate a neoliberal power structure which gives economic interests power over regulatory agencies, and prevents the NMFS from moving in new directions when old strategies are shown to be ineffective. It was an impasse such as this which prompted a recent lawsuit against the federal government over the impact of the Federal Columbia River Power System on endangered salmon.⁴ In his ruling against the

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⁴ This lawsuit was the latest in a series of lawsuits brought against the NFMS and other federal agencies in the Oregon District Court over the operation of the Federal Columbia River Power System. While this paper does not discuss the details or significance of these cases, they clearly show the reluctance of the NMFS to mandate significant changes to hydropower systems. For more information, see "The Role of the Judge in ESA Implementation: District Judge James Redden and the Columbia Basin Salmon Saga," Blumm & Paulsen (2013).

NMFS, an Oregon District Court judge concluded that "federal agencies have... continued to focus essentially on the same approach to saving the listed species – hydromitigation efforts that minimize the effect on hydropower generation operations with a predominant focus on habitat restoration. These efforts have already cost billions of dollars, yet they are failing." (*National Wildlife Federation v. National Marine Fisheries Service* (2016)). In short, the NMFS had failed to fix existing problems and consider new solutions, a trend consistent with the impasse created by the neoliberal no-surprises policy.

Additionally, NMFS faces pressure to be certain that their policies are in accordance with the "best available science," a mandate which has shielded economic interests from the ESA at least to some degree. As University of Idaho Law Professor Barbara Cosens explained, agencies must always be aware of the possibility to be challenged on their science. They may just as easily be challenged for doing too much for salmon as not doing enough, so they must ensure that without question, their decisions can be backed up by science (personal communication, July 2016). The best available science mandate also dates back to Clinton's neoliberal ESA reforms. It was the first of the administration' "ten principles for federal endangered species act policy." As discussed previously, it was also strictly enforced in *Bennett v. Spear (1997)* with the explicit intent of avoiding "needless economic dislocation". This economically-sensitive enforcement of the statute clearly reflects the neoliberal tendencies of Clinton's administration. Indeed, by being extremely conservative in its actions as a result of the best available science mandate, the NMFS is avoiding "economic dislocation," though

advocates of stronger protections for salmon would likely say that impacts to hydroelectric operations must be accepted in order to achieve meaningful recovery.

The impacts of these practices are clearly shown in the content of the 2016 recovery plan, and especially in what content it does not include. Specifically, it only very hesitantly touches on dam removal as a possible recovery action, and both the no surprises policy and the best available science requirement contribute to the agency's reluctance to breach this topic. As described earlier, the no surprises policy has made it difficult for the NMFS to publish any plan that contains recommended actions that the dam-operating agencies involved do not like. This certainly includes dam removal. Also, the agency would not suggest such a controversial action as dam removal without concrete science supporting their decision. The problem is, as discussed earlier, that in a complex ecosystem, it is very difficult to prove what impact any given action will have on salmon populations (Barbara Cosens, University of Idaho Law Professor, personal communication, July 2016). Similarly, it is difficult to prove that dam removal is the only option which would successfully lead to recovery, and because of their no surprises policy working with other agencies, the NMFS can be assured that they would not be able to publish a plan that recommended dam removal when there are still other more palatable options on the table.

Despite its limitations, the 2016 plan has actually been described as being more progressive than other recovery plans developed earlier for other populations of fish in the Columbia River (Rosemary Furfey, personal communication, July 2016). First, the Snake River plan focuses largely on an adaptive management strategy, and identifies a number of key uncertainties (such as potential impacts of climate change and current

gaps in the agency's scientific understanding of salmon's interaction with the hydropower system) (NMFS 2016, 160-162). One section in particular within the adaptive management strategy represents a small, hesitant move on the part of NMFS away to reach beyond their historical impasse with hydroelectric interests and implement more drastic recovery actions. Section 6.4 of the report, titled "Potential Future Actions," states that "we believe that the site-specific recovery actions recommended in this Plan, combined with actions already completed, will result in *progress toward* recovering species. However, these actions alone are unlikely to achieve recovery" (NMFS 2016, 185-6, emphasis added). This line is quite important to understanding the recovery planning scenario in the Snake River. It reveals that the NMFS is aware of the fact that they are being economically sensitive in their recovery planning, especially because the plan fails to include some potential recovery actions, such as the breaching of dams in the Lower Snake River. It also represents a conscious effort to move beyond the existing power structure and attempt to take more progressive action. For instance, table 6-8 in the report outlines "potential future actions," including a category titled "improve mainstem Snake and Columbia River hydropower programs, operations, and effects." While this section does not specifically address dam removal as a potential future action (instead, it focuses on reducing water temperature and pollution problems associated with reservoirs, improving fish passage around existing dams, and implementing research programs), the previous table does make brief mention of dam removal (NMFS 2016, 185-187). This table, which does not appear to have been created by the NMFS but instead by Beechie et al. 2013, summarizes "habitat restoration types and their ability to ameliorate climate change effects," includes a category called "longitudinal connectivity" or (in parenthesis), "barrier removal." This category includes "removal or breaching of dams," an action which Beechie et al. find "ameliorates temperature increase," "ameliorates base flow decrease," and "increases salmon resilience" (Beechie et al. 2013, cited in NMFS 2016, 185). In short, what this table says is that indeed (as tribes and others have been saying for years) is that dam removal would seem to be beneficial to salmon recovery. It is significant in this report because it indicates that perhaps, dam removal could be part of the NMFS's adaptive management strategy.

Many interviewees for this project expressed exasperation when asked about a possible solution to the impasse between salmon and hydroelectric power. A common sentiment was that no good solution existed, and that the conflict would continue indefinitely. What salmon recovery planning in the Snake River shows, though, is that, while the impasse between the NMFS and hydroelectric operations is perpetuated by practices that originated decades ago through neoliberal reforms to the ESA, there are signs, however small, that it will not last indefinitely.

Conclusion

Given the size of the Columbia Basin, the number of actors, from federal agencies to Native American tribes, environmental groups, and other stakeholders, the complexity of their relationships, and the long history of conflict in the basin, it is difficult to capture the nature of the situation in one short paper. This paper has sought to examine just one part of the conflict in the Columbia Basin, isolated not just to one river, but also to one

recovery planning operation and how it has been informed by two very specific outcomes of historical neoliberal influences. It is therefore not a comprehensive review of recovery planning in the Snake River, nor of the legacy of neoliberalism in current ESA implementation, and certainly not of the impasse between hydropower and salmon in the Columbia Basin.

The benefit of such a narrow scope, though, is that it reveals an often-overlooked level of complexity, and opens up the question of whether similar patterns of neoliberal influences might be observed in other aspects of the Columbia Basin impasse. It raises interesting questions about other possible ways in which neoliberalism may be influencing management of conflicts between endangered species and economic activities and private property rights, both elsewhere in the Columbia Basin but with regard to other species of endangered animals outside of the Columbia Basin. Other scholars, such as Lave (2012), who suggested that neoliberalism has significantly influenced the modern approach to stream restoration under the Clean Water Act (and whose work was a major inspiration for the research presented here) have begun to address this issue, but there remain many opportunities for further research.

What this analysis does conclusively show is that history and precedent are essential for understanding modern environmental policy. The ESA today is not the same ESA that was interpreted in *TVA v. Hill* four decades ago. It is a more complex version that must be handled with care to avoid reawakening old controversies, and in some ways it is less effective. Yet the fact remains that it has become fundamental to conservation policy in the U.S. Because of the hundreds of species and millions of acres of land which fall under its protection, in the face of modern conflicts such as the seemingly

irreconcilable impasse in the Columbia, efforts should be made to improve the act's functionality without compromising existing protections. The information presented in this research is one step toward making those improvements because it reveals underlying problems which will need to be addressed if conflicts are to be resolved.

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