The Columbia Basin Fish Accords:

Can Cooperation Save the Salmon of the Pacific Northwest?

by Amy Rawn, 2016-17 State of the Rockies Project Fellow

Introduction

In a unique instance of collaboration between salmon advocates and hydropower interests, parties formerly at odds decided to seek common ground. The resulting compromise was the Columbia Basin Fish Accords, a 10-year memorandum of agreement (MOA) between the federal agencies that operate and retail power from the federal hydropower system on the Columbia and Snake Rivers, and state and tribal entities interested in the preservation of salmon and steelhead populations. The Accords were conceived in 2008 and guarantee close to $1 billion in funding for diverse salmon recovery projects such as habitat restoration (CRITFC 1). The agreement also placed particular restrictions on the signing parties, one being that they could not support dam removal or more spill over the dams in any form[1] (MOA 2008; Goldfarb 2014). Funding for these projects is generated from the sale of hydroelectricity by a federal agency. For the parties involved, the Fish Accords sought to reconcile legal disagreements related to federal agencies adherence to a number of federal laws such as the Endangered Species Act and the Northwest Power Act (MOA 2008, 1). In addition to resolving these decades-old disputes over environmental legislation, the Fish Accords also sought to cultivate a more "cooperative" working relationship between the parties (Ibid.).

At their core, the Fish Accords grapple with challenges that have long perplexed the Columbia River Basin: the coexistence of endangered salmon and steelhead with the hydropower system. Can these fish, which face a myriad of challenges in a complex natural environment, thrive on a dammed river? Can the endangered runs of salmon and steelhead be revived through mitigation alone, or do more far-reaching tactics like the modernization of dam operations or perhaps dam breaching need to occur? The Fish Accords brought to light some of the benefits of compromise and collaboration, but also stirred criticism from those who saw the Accords as preserving a legacy in which the impacts of hydropower are not sufficiently addressed or scrutinized. In the second to last year of the Accords, many of these questions still don't have clear answers. As the Accords are set to expire in 2018, it is still uncertain if the signatories will seek to renew the compromise or draft a new version of the Accords, but a recent U.S. District Court for the District of Oregon decision may have the potential to guide federal agencies toward more careful consideration of their dam operations.

The Fish Accords Signatories

Tribal Sovereigns and a Fish and Wildlife Agency

The projects funded by the Accords extend across the large geography of the Columbia River Basin and have diverse foci that aim to mitigate the impacts that the federal dams have on fish in the basin. In addition to habitat restoration, the Accords also provide funding for improvements to hatchery programs and enhanced monitoring techniques, among other restoration initiatives (CRITFC 1; MOA 2008). Some Accords funding even went towards providing rubber bullets to control salmon

Amy Rawn is a Student Fellow for the 2016-2017 State of the Rockies Project. Growing up on the coast of Maine, Amy spent her summers racing sailboats and winters skiing on the icy slopes of the East. As a Southwest Studies major and Environmental Issues minor, Amy is interested in human-environment relationships and understanding how people relate to the natural world.

[1] Spill refers to "water released from a dam over the spillway instead of being directed through the turbines" (Supplemental Biological Opinion 2014, 27). Spill benefits migrating juvenile fish, also known as smolts (Goldfarb 2014).

predators such as sea lions. The parties implementing these types of projects funded by the Fish Accords are the non-federal Accords signatories, which are composed of six tribal sovereigns and three states[2] (Goldfarb 2014). Three of the participating tribes, the Yakama, Umatilla and Warm Springs[3] are member tribes of the Columbia Basin Inter-Tribal Fish Commission (CRITFC), a science and policy agency that serves the four main Columbia Plateau tribes in the basin (CRITFC 3).

CRITFC was the result of a collaborative effort between the four main Columbia plateau tribes, the Umatilla, Yakama, the Warm Springs and the Nez Perce Tribe[4] (CRITFC 5). The organization is vested in their mission "to ensure a unified voice in the overall management of the fishery resources, and as managers, to protect reserved treaty rights through the exercise of the inherent sovereign powers of the tribes." The agency pursues these goals through policy development and scientific research (CRITFC 3). CRITFC also received funding from the Fish Accords for a diverse set of restoration initiatives (MOA 2008).

The Columbia River basin is governed by a complex network of tribal, state and federal entities, all of which have different histories, interests and positions of power. The tribes in the Columbia River basin have their own histories of salmon advocacy and are some of the strongest actors undertaking restoration action (McCool 2007). For the Pacific Northwest tribes, the preservation and revitalization of salmon populations is immensely important as they remain vital to economic livelihoods and hold significant cultural and spiritual meaning (CRITFC 2). Treaty rights and past legal cases have shaped the tribes' position as managers in the basin (Volkman & Mcconnaha 1993). In an 1855 series of treaties known as the Stevens Treaties, tribes ceded 35 million acres of land to the federal government for the guarantee that they would be able to fish at "all other usual and accustomed stations," meaning their traditional fishing grounds (McCool 2007, 554; Che Wana Tymoo 2010). The tribes have struggled for their right to harvest these salmon runs and it has taken decades of activism, advocacy and litigation to secure what they were promised (Che Wana Tymoo 2010; Goldfarb 2014). The tribes continued to fight for their harvest rights into the 1960s and early 70s. Legal victories in this era resulted in the ruling that tribes should receive a "fair share" of the harvest, which was determined to mean 50 percent, in accordance with the 1885 treaty (Che Wana Tymoo 2010). Tribal efforts reshaped the management of fisheries, and by the mid-1970s, the tribes were being acknowledged for their habitat preservation efforts (Volkman & Mcconnaha 1993). The tribes have a deep interest in preserving these species, and have continued to advocate for fish and the recognition of their treaty rights, for as McCool points out, treaty rights "…are, of course, meaningless if there are no fish in the rivers" (McCool 2007, 554).

Salmon and steelhead in the Columbia River Basin contend with a multitude of challenges when making their journey from inland estuaries to the Pacific Ocean. It is no secret in the Pacific Northwest that salmon and steelhead runs have dramatically declined from their historic levels. One of the obstacles that these fish face, which has contributed to the species' decline, is navigating the river's extensive network of hydroelectric projects, known collectively as the Federal Columbia River Power System (Blumm & Paulsen 2013).

The Federal Columbia River Power System and the Associated Federal Agencies

The Federal Columbia River Power System (FCRPS) is comprised of 31 federally owned hydroelectric projects in the Columbia River basin (BPA 1). The two federal agencies that operate these dams are the U.S. Army Corps of Engineers (the Corps) and the Bureau of Reclamation (BOR). A third federal agency, The Bonneville Power Administration (BPA) is responsible for retailing the electrical power produced by these hydroelectric projects throughout the region. The agency falls under the umbrella of the Department of Energy, but they are unique

[2] Other signing parties included the Confederated Tribes of the Colville Indian Reservation, the state of Idaho, the state of Montana, the state of Washington, the Shoshone-Bannock Tribes and the Kalispel Tribe of Indians (Goldfarb 2014; Federal Caucus). These parties are not part of the same Memorandum of Agreement (MOA) as the parties listed above (MOA 2008).

[3] The official names of the tribal sovereigns are the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon and the Confederated Tribes and Bands of the Yakama Nation (Federal Caucus).

[4] The Nez Perce Tribe chose to not sign onto the Accords for reasons explored later in this report.

in the sense that they are funded by their own sales of wholesale power rather than having funds allocated by Congress (BPA 2). BPA was established with the signing of the Bonneville Power Act in 1937 and since then has become cemented as a powerful institution in the Pacific Northwest (White 1995). By their own account, BPA supplies around 28 percent of the electricity that is consumed in the Pacific Northwest (BPA 2). The development of the Columbia and Snake Rivers, however, has not come without a cost. The river in many ways has been transformed. Once wild and rumbling with substantial rapids and waterfalls, the Columbia has been tamed by concrete and currently only flows unhindered in a couple sections of the river (Rohlf 2006).

The twentieth century brought a cascade of dam construction to the Pacific Northwest. It was a time of incredible optimism for those planning ways to utilize this mighty power. They saw the region as brimming with the potential to be bettered by the promise of hydroelectricity. The philosophy was simple, as White articulates, "Hydropower was good, clean and renewable. There could never be too much of a good thing" (White 1995, 72). This transformation, while it has yielded particular benefits, has also obstructed the migration of anadromous fish (Rohlf 2006). Besides being merely a physical barrier for fish, dams can also elevate water temperature and make it easier for predators to feed on juveniles. Dams can also make the journey to the ocean longer for fish, which can throw off their biological responses that readies them to enter a saltwater ecosystem (Blumm & Paulsen 2013). In a basin in which salmon and steelhead runs once reached copious numbers, thirteen species of salmon and steelhead are now listed as either threatened or endangered (Rohlf 2006; Supplemental Biological Opinion 2014).

Implementation of the Endangered Species Act and The Federal Columbia River Power System Biological Opinion

The decline of these important fish did not go unnoticed. In 1990, citizens[5] rallied and began to call for what some have referred to as the "pit bull of environmental laws" to show its teeth (Blumm & Paulsen 2013; Rohlf 2006, 3). The Endangered Species Act (ESA) became law in 1973. Its purpose is clear: to preserve and recover threatened and endangered species. It is to be applied when a problem already exists and powerful measures are needed to correct it (Blumm & Paulsen 2013; Benson 2013). When the ESA made its debut in the Columbia River Basin, it ushered in new standards for how the federal agencies could operate (Volkman & Mcconnaha 1993). The ESA dictates how the federal agencies that manage the dams, address the impacts those operations have on ESA listed species. This is accomplished through what is known as a Biological Opinion (BiOp). The origins of the Columbia Basin Fish Accords are rooted, in part, in a long legal dispute over the BiOp for the Federal Columbia River Power System (Blumm & Paulsen 2013). In signing the Accords, the signatories agreed to withdraw from the litigation disputing the BiOp and opted for an approach outside of the courtroom (MOA 2008; CRITFC 1). In order to understand the origins of the Fish Accords it is important to first recognize how federal law shapes salmon policy in the Pacific Northwest, including historic implementation of the Endangered Species Act.

The Nuts and Bolts of the Endangered Species Act

The Endangered Species Act (ESA) bars federal agencies from operating in a manner that has a likelihood of negatively impacting a species listed under the ESA to the degree that it puts the species in jeopardy or disturbs habitat that it depends on, which is defined in the ESA as "critical habitat" (Blumm & Paulsen 2013, 100). Although the term jeopardy is not given an exact definition in the ESA, Blumm & Paulsen point out that an ESA regulation does describe "jeopardize the continued existence of" as follows: "engag[ing] in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species" (Ibid.). If a federal agency suspects that they are operating in a way that could have an impact on a threatened or endangered species or its critical habitat, it is required to go through a series of

[5] The Shoshone-Bannock Tribe called for the listing of Snake River sock-eye salmon under the Endangered Species Act. NOAA listed the fish in November of 1991 (Blumm & Paulsen 2013).

steps to try to determine the nature of that impact; this process starts with a biological assessment. In the context of the ESA, these federal agencies are often referred to as action agencies, as it is their conduct or *action* that is being evaluated (Ibid.).

The biological assessment can have one of two outcomes; the action agency can determine that their actions are unlikely to harm the species or its critical habitat and they can carry out a "no-jeopardy" process (Ibid.). Alternatively, it can conclude that its actions may in fact do the opposite and harm a threatened or endangered species. In this case, under Section 7 of the ESA, action agencies are required to refer to a consulting agency to "insure that any action authorized, funded, or carried out by such agency…is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of [designated critical] habitat…" (NWF v. NMFS 2016, 20). The consulting agency for the FCRPS is the National Oceanic and Atmospheric Administration (NOAA) Fisheries (also known as the National Marine Fisheries Service (NMFS).[6] Following a consultation with the action agencies, the consultation agency (NOAA Fisheries) produces a Biological Opinion (BiOp; Blumm & Paulsen 2013).[7]

If a proposed action is identified in the Biological Opinion as potentially jeopardizing a species or having an adverse effect on its critical habitat, it is required to propose a "reasonable and prudent alternative" to the action. The ESA defines "reasonable and prudent alternatives" as "alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purposes of the action" (Benson 2013, 488). "Reasonable and prudent alternatives" can be diverse in nature and can range from a modification to the hydropower system to a habitat improvement project, like some of the initiatives that are being implemented with Fish Accords Funding (Supplemental Biological Opinion 2014).

Ultimately, the BiOp examining the Federal Columbia River Power System evaluates the condition of ESA designated species and their habitat, makes an assessment of the actions of federal action agencies and decides if they think the actions are "likely to jeopardize the continued existence" of an ESA listed species or have a negative effect on its critical habitat (NWF v. NMFS 2016, 21). If the actions have the potential to put ESA listed species in jeopardy, the BiOp may include "reasonable and prudent alternative[s]" or a plan for how to avoid jeopardy and remain in compliance with Section 7 of the Endangered Species Act (Ibid.).

Many argue that the Endangered Species Act is one of the nation's most powerful environmental laws. As Volkman & Mcconnah assert, "The Act is shifting the burden of persuasion away from those who urge attention to the problems of wild salmon to those whose development activities affect listed fish" (Volkman & Mcconnah 1993, 1263). Some environmental statues dictate giving equal attention to ecological concerns and other interests such as development, the ESA however, makes no requirement of assigning the same weight to the region's hydroelectricity as it does endangered fish (McGinnis 1995). In other words, "In accordance with the ESA, industrial, commercial, residential, and recreational use-values of the regional ecosystem are secondary to listed species preservation" (Ibid.). Under the ESA, salmon is king. Although a listing under the Endangered Species Act in the Columbia River Basin may appear to be the cure-all for increasing fish populations, the actual implementation of the law has been more difficult, and has resulted in more than two decades of litigation over the Federal Columbia River Power System (FCRPS) Biological Opinion.

The History of the Litigated Federal Columbia River Power System Biological Opinion

In the Columbia River basin, the production of a legally sound Biological Opinion (BiOp) has been an unsuccessful task. The Federal Columbia River Power

[6] The U.S. Fish and Wildlife Service and the National Marine Fisheries Service, also known as NOAA Fisheries, are two federal agencies that are responsible for producing biological opinions on ESA listed species. The FWS is responsible for landlocked species and NOAA Fisheries is responsible for species that live exclusively in the ocean or are anadromous (Benson 2013).

[7] The action agencies for the FCRPS BiOp are the Army Corps of Engineers and the Bureau of Reclamation (NWF v. NMFS 2007).

System (FCRPS) BiOp has faced continued litigation that has now lasted for close to two decades. Upon examining the plaintiffs concerns, the U.S. District Court has repeatedly found the attempts of NOAA Fisheries to produce a FCRPS BiOp that meets the requirements of the law to be inadequate. It has been a long cycle of litigation that remains unresolved. Some of the parties who chose to not participate in the Accords, still remain involved in the litigation involving the FCRPS BiOp, such as the state of Oregon and the Nez Perce Tribe (NWF v. NMFS 2016)

In December of 2000, NOAA Fisheries produced a BiOp evaluating the FCRPS, after a previous version in 1993 was remanded on the grounds that it was arbitrary and capricious (NWF v. NMFS 2007). The 2000 BiOp concluded that the ongoing activities of the FCRPS would "jeopardize" eight ESA listed species of salmonids. NOAA Fisheries then considered "reasonable and prudent alternatives" to see if other actions could be taken to avoid jeopardy. They concluded that these actions would not avoid jeopardy and turned to "off-site mitigation activities" such as hatchery and habitat projects to remain in compliance with Section 7 of the ESA (Ibid.).[8] Ultimately, however, the legality of the 2000 BiOp was challenged in court. The lead plaintiff in the case against the BiOp, from a large roster of environmental organizations, was the National Wildlife Federation. The four mid-plateau Columbia Tribes, the Yakama, the Warm Springs, the Nez Perce Tribe and the Umatilla, along with the state of Oregon, presented amicus curiae briefs in favor of the plaintiffs (Blumm & Paulsen 2013). The 2000 BiOp was ultimately found to be "arbitrary and capricious" for two main reasons: "it relied on (1) federal mitigation actions that had not been subject to Section 7 consultation and (2) non-federal mitigation actions that had not been shown to be reasonably certain to occur." (NWF v NMFS 2007). Although Judge Redden, the presiding U.S. District judge at the time, determined that the BiOp did not meet the requirements of the law, he did not completely throw out the plan. He called for the BiOp to remain in place as a temporary solution (Blumm & Paulsen 2013). NOAA Fisheries was given another attempt at the BiOp, and in 2004, they returned with an amended version

The 2004 Biological Opinion, like its predecessors, faced legal scrutiny. Unlike its forerunners, however, this Biological Opinion presented a new way of evaluating if executed actions jeopardized an endangered species. It essentially incorporated the network of dams in the "environmental baseline," the standard used to determine harm. In other words, it grandfathered in the FCRPS and treated the dams as a fixed component of the river system. The BiOp concluded that the dams were not something that the agencies had the mandate to address. NOAA Fisheries determined (referring to the authority of the federal agencies) that "each of the dams already exist[ed], and their existence [was] beyond the scope of the… discretion" (Ibid.).

Environmental groups disagreed with the standard this was setting, as they saw it as prioritizing hydropower over endangered species—the same qualm the groups had with the previous Biological Opinion (Blumm & Paulsen 2013). There were multiple problems with the 2004 Biological Opinion, and ultimately, Judge Redden determined that the 2004 BiOp did not meet the requirements of the law. On appeal, the Ninth Circuit Court affirmed his decision and found the BiOp to be "structurally flawed" (NWF v. NMFS 2007; Blumm & Paulsen 2013). NOAA Fisheries was sent back to the drawing board to attempt yet another Biological Opinion.

Despite the plaintiff's legal victories in court, the litigation put a considerable strain on tribal resources. CRITFC policy analyst Laurie Jordan explained that litigation has a "high transaction cost" (Laurie Jordan, personal communication 2016). The BiOp litigation has been a cyclical pattern. After a BiOp was pronounced unlawful, it would be remanded and NOAA Fisheries would get a chance to start over with few tangible benefits for fish and fish managers. For the parties that chose to sign the Accords, the agreement was an opportunity to redirect resources outside of the courtroom where they could be put towards more material benefits for fish (CRITFC 1).

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[8] Under Section 7 of the ESA, action agencies are obligated to refer to a consulting agency to "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 [designated critical] habitat..." (NWF v. NMFS 2016, 20).

Compromise in the Basin

For the signing parties, the Accords signified an important turning point, the end of a long legal dispute over the FCRPS Biological Opinion. The new cooperation utilized resources formerly allocated for litigation and put them towards mitigation projects. In the eyes of participants, one of the clear victories of the Accords was this redirection: a shift in focus from litigation to tangible fish recovery projects. "These Accords move focus away from gavel-to-gavel management and toward gravel-to-gravel management. By putting litigation behind us and putting actions to help fish in front of us, we will better ensure that Columbia Basin fish will benefit," said Steve Wright, the BPA administrator at the time (Ibid.). For the signatories, the influx of funds from BPA directed toward fish recovery projects was not only a promising sign for restoration projects, but signified a change in the relationship between CRITFC, the tribes and the federal agencies. They were no longer defendants and plaintiffs, they were partners (CRITFC 1; MOA 2008).

Case Study: Implementing Accords Funding in the Hood River Basin

In order to understand how mitigation projects funded by the Fish Accords are being implemented, we traveled to the Hood River Basin, one of many sub-basins in the Columbia River Basin, where Accords signatories are engaging in a variety of efforts to revitalize salmon and steelhead populations. The Hood River is a tributary that joins with the Columbia in northwestern Oregon. The river eventually forks three ways, branching into the West Fork, the Middle Fork and the East Fork. The Parkdale Fish Hatchery sits between the Middle Fork of the Hood River and Rodgers Creek. Driving to the hatchery from the town of Hood River, one is struck by the abruptness with which Mount Hood juts towards the sky, a towering backdrop against rows of fruit trees. Even in the summer, the volcano is still snowcapped. At the Fish Hatchery, we met up with Chris Brun, the Hood River Production Program Coordinator for the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO). The

Figure 1: Mount Hood

The view of Mount Hood from Parkdale, Oregon. Snowmelt from the mountain feeds the Hood River in the valley below.
Source: Photographed by Don Siebel and accessed at donsiebelphotography.wordpress.com

facility is operated by the Confederated Tribes of the Warm Spring's Branch of Natural Resources and owned by the Bonneville Power Administration (HRPP Annual Operation Plan 2016).

The Hood River Production Program began operating in the early 1990s and is run in collaboration with the Oregon Department of Fish and Wildlife. The program seeks to reintroduce spring Chinook salmon in the basin after the run became extinct in the late 1960s. It also seeks to boost the natural production of winter steelhead. Its third goal is to supply these two types of salmonids for tribal and recreational fisheries. The program also has a strong focus on habitat restoration (HRPP Annual Operation Plan 2016; McCanna & Eineichner 2015). The program has received funding from the Fish Accords (MOA 2008; Chris Brun, personal communication 2016).

A short car trip from the Parkdale Hatchery is the Moving Falls Fish Facility. Located on the West Fork of the Hood River, the Facility has recently built a new fish trap—infrastructure made possible by the Fish Accords. Here, at the fish trap, salmonids at the top of Moving Falls are ushered into a small holding pond below the facility. Once corralled, the fish are hoisted up in an elevator-like contraption from the river below and ushered onto a platform that allows individuals to perform management and monitoring techniques. The fish are temporarily subdued with electrical currents, checked for small electric devices that monitor migration, and sampled for DNA to determine age (HRPP Annual Operation Plan 2016; Chris Brun, personal communication 2016). Chris acknowledged the importance of the work that the tribes are doing. "[It's] not just about restoring fish," he says "but restoring [the tribe's] presence." (Chris Brun, personal communication 2016). McCool has also recognized the significance of tribal restoration efforts, commenting that "in a larger sense, these river restoration projects are really tribal restoration projects; they are part of an effort to restore cultural tradition, sovereignty, and self-reliance" (McCool 2007, 561). For tribes participating in the Accords, the agreement was an opportunity to not

Figure 2: Moving Falls Fish Facility

At the Moving Falls Fish Facility on the West Fork of the Hood River, staff members at the "Fish Trap" temporarily subdue a salmon to conduct management and monitoring techniques. Source: Jonah Seifer

only restore salmon and steelhead populations, but also improve struggling tribal economies (Goldfarb, 2014).

The initiatives of the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO) to revitalize fish populations are diverse. Funding from the Accords allowed for a partnership between the tribes and two irrigation districts, the East Fork Irrigation District and the Mt. Hood Irrigation District (Personal Communication, Chris Brun 2016; MOA 2013). In the Hood River Basin salmon and steelhead must compete with agriculture for their share of the river. According to Brun, water management in this basin is tremendously important. Close to sixty percent of the Hood River is diverted for irrigation. Climate change is expected to result in wetter winters and drier summers, and more precipitation is expected to come in the form of rain, rather than snow. Now and in the future, every drop will be important for both migrating fish and irrigators in the Hood River Basin (Chris Brun, personal communication 2016).

The Accords provided more than $1.5 million for new irrigation diversion infrastructure with a fish passage improvement that allows fish to navigate up the East Fork of the Hood River (MOA 2013; Chris Brun, personal communication 2016). The CTWSRO voiced concern that the diversion site on the East Fork of The Hood River, which the two districts use to divert water, was hindering fish passage at times when the river flow was modest. CTWSRO, using Accords funding, orchestrated a new project that would install a diversion structure that allowed for permanent fish passage on the condition that "…a minimum flow is provided which will aid fish passage through the Project area" (MOA 2013, 2). The project was completed in the fall of 2013 and is still in a five-year evaluation period, in which tests are being conducted to determine the adequate flow for adult spring Chinook to pass the diversion site (MOA 2013; Hood River Soil & Water Conservation District). In a basin where river flow is a limiting factor for fish, projects negotiated by diverse stakeholders that keep water in the river represents a significant success for salmon and steelhead (Chris Brun, personal communication 2016).

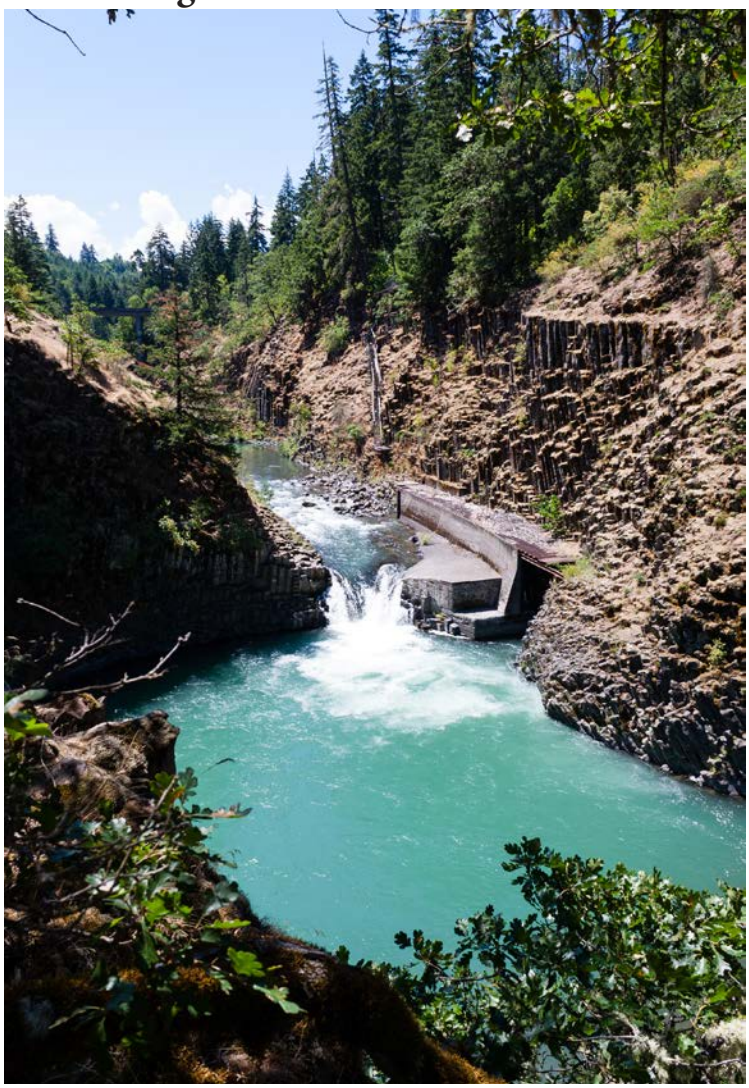
For Brun and his program, the Accords also presented a welcome improvement in the funding mechanism for fish projects in the basin. In his opinion, the Accords

Figure 3: Staff Member Transports Salmon at the Moving Falls Fish Facility

An adult Chinook salmon is released back into the West Fork of the Hood River from the Fish Trap at the Moving Falls Fish Faculty. Source: Jonah Seifer

provided more certainty and durability in funding than a prior process that required applying on an annual basis or multi-annual basis for BPA funding through the Northwest Power and Conservation Council, a regional organization created by the passing of the North West Power Act. The Accords guaranteed funding for more extended periods of time, allowing long-term projects to have increased financial security. Chris added that funds are not distributed without oversight, and projects must seek approval from an independent scientific review board and meet certain criteria, but ultimately he says, "you know the dollars are there" (Chris Brun, personal communication 2016).

Figure 4: Punch Bowl Falls



Punch Bowl Falls is a tribal fishing location and County Park at the confluence of the East and West fork of the Hood River. Source: Jonah Seifer

Brun also praised the efficiency of the Accord's review process and the ability to get the *green light* for projects to move forward. (Chris Brun, personal communication 2016). Christine Golightly, a policy analyst at CRTIFC, also spoke to this increased flexibility and ability for long-term planning that came with the Accords. "With ten years of funding we could plan longer term projects," said Golightly. This assurance provides increased "security" for tribal members and communities, who could count on project funding not running out (Christine Golightly, personal communication 2016). One of the goals of the Accords was "to address the Parties' mutual concerns for certainty and stability in the funding and implementation of projects for the benefit of fish affected by the FCRPS and Upper Snake Projects…" (MOA 2008, 1) The Hood River Production Program is an example of how the resources from the Accords are meeting a diverse set of needs. For Chris Brun and others, the Accords provided more dependable funding than distribution through the Northwest Power and Conservation Council, and has allowed for important long-term planning .

The Northwest Power and Conservation Council and the Northwest Power Act

Before the Fish Accords, the Hood River Production Program previously received funds for some of its projects now financed by the Fish Accords from the Northwest Power and Conservation Council. Like the Fish Accords, the Council's funding comes from the Bonneville Power Administration. The Accords are not the first instance of BPA money being distributed for restoration and recovery projects in the Columbia River Basin, but for some it changed the mechanism by which these funds are distributed (McGinnis 1995; Chris Brun personal communication 2016).

The Northwest Power Planning Council, which today is called the Northwest Power and Conservation Council, was created by an act of congress in 1980 as a component of the Northwest Power Act[10] (Mentor 2008; McGinnis 1995). The Council is not a federal agency, but rather an interstate compact between Idaho, Montana,

[10] Commonly referred to as the Northwest Power Act today, the act is also known as the Pacific Northwest Electric Power Planning and Conservation Act (Mentor 2008)

Washington and Oregon. The Council is made up of two representatives from each state nominated by their respective governor and lacks tribal representation (Northwest Power and Conservation Council Annual Report 2007). When the act was passed, it was an unprecedented federal approach to fish and wildlife concerns in the basin. Both the Act and the Council came about at a point in history when there were mounting apprehension about both the long-term electricity demands of the Pacific Northwest as well as the continued existence of salmon, who were experiencing alarming reductions in their population (Mentor 2008).

At its core, the Northwest Power Act was meant to address these two concerns and was intended to reconcile the competing interests of hydroelectricity and fish (Mentor 2008; McGinnis 1995; Volkman & Mcconnaha 1993). The act explicitly states that it aims to require "equitable treatment" for fish and wildlife in conjunction with energy interests (McGinnis 1995, 69). The Council's hybrid approach works on a plan that "will assure the region of a safe, reliable, and economical power system with due regard for the environment" as well as a program with the intent to "protect, enhance, and mitigate fish and wildlife affected by the Columbia River hydroelectric system" (Ossmann 2014). This program is formally known as the Columbia Basin Fish and Wildlife Program (McGinnis 1995).

The funding for the Fish and Wildlife Program comes from the Bonneville Power Administration (Ibid.). States and tribes make proposals to the Council for projects that they would like to see implemented. The Act demands collaboration and relies on the input and knowledge of federal, state and tribal fish and wildlife managers (Mentor 2008). Although the Council makes recommendations to BPA, ultimately BPA establishes the Council's budget for the Fish and Wildlife Program (McGinnis 1995). When the law was created, the expectation was that both of these interests could be treated with equal concern, but some argue that a more complicated reality exists. Instead of promoting *both* interests simultaneously, McGinnis argues that the act employs competing messages that challenge each other:

> "The Act provides a mixed mandate: "to protect, mitigate, and enhance" fish and wildlife, but to do so while planning for the energy needs of the region at the "lowest cost." This mixed mandate pits the interest for energy production, the Bonneville Power Administration (BPA), against advocates for ecological conservation and restoration" (McGinnis 1995, 85).

The Northwest Power Act sought to increase cooperation and participation, but some are of the opinion that involving more actors that have other interests and priorities in restoration initiatives may have some negative effects. Volkman & Mcconnaha argue:

> "if the Northwest Power Act provided important incentives for coordination, it also broadened the range of influential parties. Before the Act, a wide array of fish and wildlife agencies, Indian tribes, fishing and conservation groups, and federal courts determined salmon policy. After the Act's passage, many salmon recovery measures have been financed by the hydroelectric system through the Bonneville Power Administration. Bonneville, the electric utilities, the Army Corps of Engineers, public and private utilities, and others have joined the debate, and the problems of coordination have been compounded" (Volkman & Mcconnaha 1993, 1266)

The Northwest Power Act enabled a significant amount of funding to be put toward recovery and restoration, but it also gave federal agencies such as BPA, (an agency that has a commitment to fish and wildlife recovery, but ultimately holds the generation of hydropower sales as its bottom line) increased authority in determining fish policy in the basin. The question of influence that Volkman & Mcconnaha were pondering back in the 1900s still remains relevant today, and has been highlighted by some opponents of the Fish Accords. How has the position of federal agencies at the decision-making table influenced salmon restoration efforts in the basin, and in particular, has it shaped the origins of the Fish Accords?

BPA Funding Cuts to Tribal Programs

"This is a time for a greater regional commitment, not a lesser commitment" (Letter of Public Comment, Suppah, Washines, Minthorn, Miles 2006, 3).

In the early 2000s BPA started to take steps to cut back on spending for the Columbia Basin Fish and Wildlife program. In 2003 when close to $21 million was cut from the program, the Northwest Power and Conservation Council expressed concern about the drawbacks, saying that although they may be acceptable this year, they would not be sustainable in the future (Mentor 2008). In 2005, BPA started to consider its budget for the years 2007 through 2009 (see **Figure 5**). Their proposal showed a rise in expenditures and was set at $143 million annually, but according to the Council that type of funding was not enough to meet even its minimal needs. The Council pushed back against the budget in a letter to BPA saying that they did "not believe that this level of expense funding would support the most fundamental work of the program" (Mentor 2008, 23). The Council recommended that in order to meet their goals, an annual expense budget of $161 million would be adequate in 2007. BPA did not follow the Council's request:

> "On February 9, 2007, BPA issued a Record of Decision for its 2007-09 funding decision. Once again, BPA disregarded the Council's concern about inadequate funding for Program implementation and established the 2007-09 Fish and Wildlife Program Budget at $143 million expense and $36 million in capital expenditures" (Mentor 2008, 23-34).

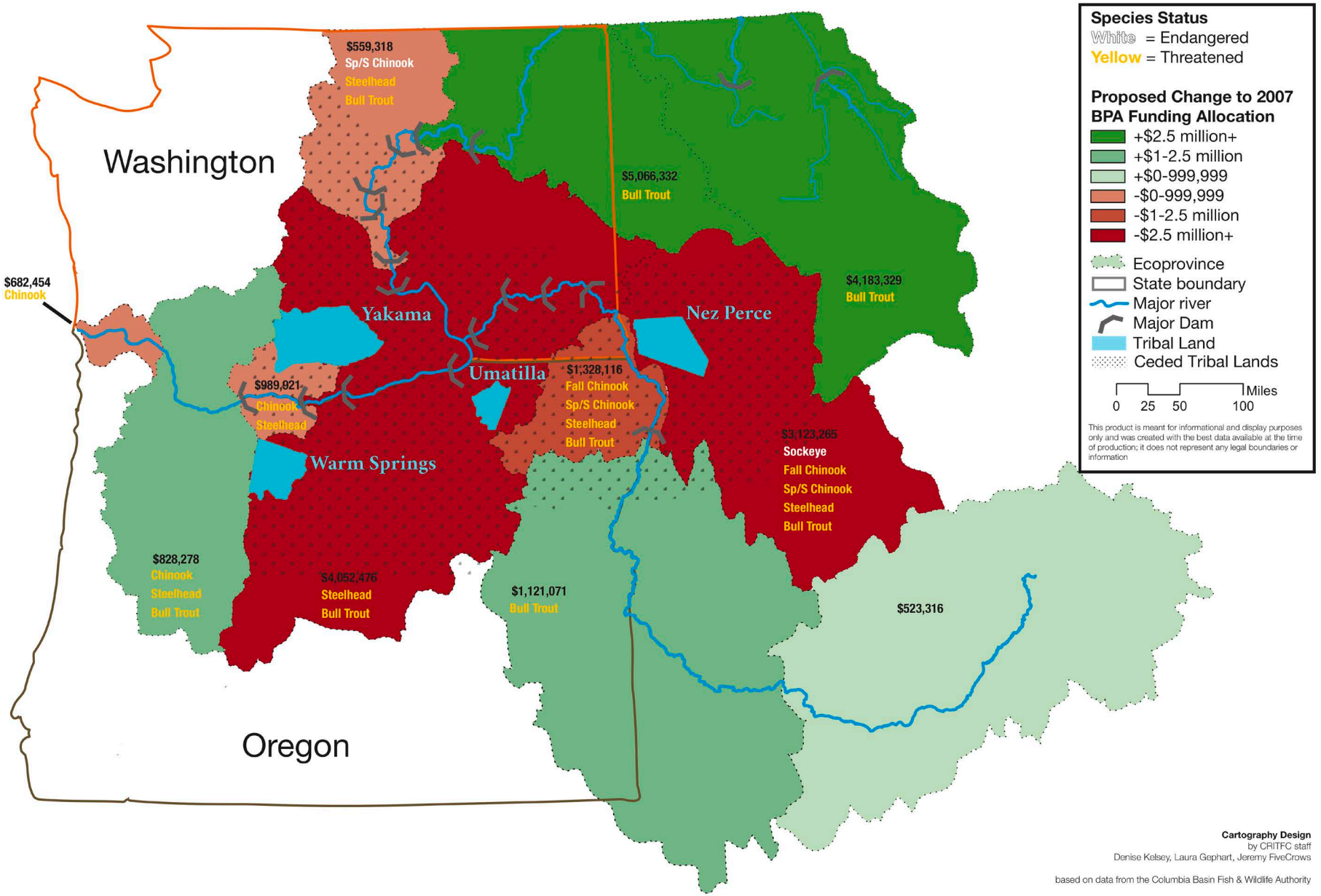
There was concern within and among the tribes that the budget was significantly falling short of meeting the biological targets for the Fish and Wildlife program and that more funding was necessary to keep the program on track. In a letter from the Yakama, Umatilla, Warm Springs and Nez Perce Tribe addressing these concerns, they point out that both of their attempts to inform the Council of their unease with the budget (on June 21, 2005 and January 10, 2006) were met with no reply (Letter of Public Comment, Suppah, Washines, Minthorn, Miles 2006, 2). In a 2006 letter addressing the Council from the four tribes that compose the Columbia River Inter-Tribal Fish Commission, the member tribes shared their concerns with the inadequate budget:

> "The overall funding made available is inadequate, programs that are critical for the tribes are being slashed, entire species are dropping from the Program..." (Ibid.).

There was also criticism of the Council's acceptance of a budget before projects were completely evaluated, "The Council adopted a Program funding cap prior to submission and review of project proposals, thereby limiting the ability to objectively recommend a suit of projects that fulfills the intent of the Act and the Program" (Letter of Public Comment, Minthorn, 2006, 2). Not only did the budget itself receive criticism, but the funding of particular programs over others also came under scrutiny. The four tribes that make up CRITFC commented on the process for evaluating proposed projects, saying that the "standards, criteria, and methods to prioritize projects (if there were any) were inconsistent from state to state" (Letter of Public Comment, Suppah, Washines, Minthorn, Miles, 2006, 2).

The Council, CRITFC and many of the tribes had warned that BPA was grossly underfunding the Fish and Wildlife Program. As CRITFC policy analyst Laurie Jordan shared that it was an impactful time, especially for the tribes. Programs were facing major cutbacks and individuals were losing their jobs. "The middle Columbia [was] getting programs gutted with serious consequences" (Laurie Jordan, personal communication 2016). For the signing tribes, the Fish Accords addressed this need for funding. But for others, it was not such a simple solution. Some opponents of the Fish Accords were critical of the fact that BPA ultimately controlled the purse strings for both funding mechanisms, The Columbia Basin Fish and Wildlife Program, which is overseen by the Northwest Power and Conservation Council *and* the newly packaged solution: the Fish Accords, a deal that does not allow signing parties the ability to endorse dam removal or support increased spill.

Figure 5: Proposed Budget Reallocation for the Northwest Power and Conservation Council's Fish and Wildlife Program for the 2007-2009 Fiscal Year



This map is illustrates the proposed BPA budget allocation to the Northwest Power and Conservation Council's Fish and Wildlife Program. Tribal programs faced significant cutbacks in the budget restructuring. Source: CRITFC and the Columbia Basin Fish and Wildlike Authority

Disaccord in the Columbia Basin: The Nez Perce Tribe and a Commitment to a "4-H" Approach to Salmon Restoration

"What it came down to was that we are the tribe that has the most to lose by not talking about breaching the Snake River dams."
(Rebecca Miles as cited in Hawley 2011, 212)

Located in north central Idaho, the Nez Perce Reservation is encompassed by three waterways, the Salmon, Clearwater and Snake Rivers. Treaty agreements in 1855 shrunk the territory of the Nez Perce Tribe to 7.5 million acres, an area that was later diminished to 770,000 acres by the U.S. government. Prior to entering into a treaty that promised the tribe fishing rights at their "usual" fishing areas for the price of vast amounts of land, the territory of the Nez Perce Tribe expanded close to 16 million acres across what are currently the states of Washington, Idaho and Oregon (McNeel 2007; McCool 2007).

The tribe is well known for reintroducing Coho Salmon in Idaho's Clearwater Basin after they became extinct in 1987 (Kunz 2012), as well as for their work in revitalizing the Snake River fall Chinook run (Learn 2012). The tribe has also gained a reputation for their innovative hatchery methods, which James Holt, director of the Water Resource Division within the Nez Perce tribal Department of Natural Resources, describes as "nature's rearing." (James Holt, personal communication 2016). The Nez Perce Tribe utilizes curved rearing ponds with currents that imitate stream flows; a dynamic environment that is more representative of Idaho's waterways (CRITFC 4). The efforts are focusing on "teaching them to be wild" says Rebecca Miles, the executive director of the Nez Perce Tribe (Rebecca Miles, personal communication 2016).

Almost a decade ago, the Nez Perce Tribe decided to abstain from the Fish Accords. Rebecca Miles has explained the tribe's reasoning for opting out. Overlooking the impact that dams have on their fish runs was not something that the Nez Perce Tribe thought they could afford to do, and signing the Accords would prevent the tribe from promoting dam removal. Miles explains:

> "What it came down to was that we are the tribe that has the most to lose by not talking about breaching the Snake River dams. We respect the decisions the other tribes made. But we feel like all of the options had to be on the table. We've advocated dam breaching along with the other tribes for a long time now. Like the other tribes downstream, salmon are a huge part of our culture and our religion and economy. But for us, our salmon have to deal with those dams before we can fish them. Getting some kind of major change done with the dams is a good thing for us to fight for" (Rebecca Miles as cited in Hawley 2011, 212).

The Nez Perce Tribe sits downstream from the Lower Four Snake River dams, which present an additional obstacle for salmon and steelhead to navigate. In an interview in High Country News, Dave Johnson, Program Manager of the Nez Perce Tribe Department of Fisheries Resource Management points out that habitat restoration is less of a priority for the Nez Perce Tribe, because much of their critical salmon habitat is in good condition and are protected lands, "This is some of the best salmon habitat we've got left" he says (Goldfarb 2014). Despite this exceptional habitat, fish numbers remain low, says Johnson, an indication that habitat-focused efforts alone cannot allow for substantial recovery (Ibid.).

The Save Our Wild Salmon Coalition, a cohort of NGO environmental advocacy groups, also commented on the extent of the Accords focus on habitat restoration, saying that these efforts are important for some listed runs like the Upper Columbia spring Chinook and the Upper Columbia Steelhead, but are not the "silver bullet" for all salmonids in the basin (Letter of Public Comment, Save Our Wild Salon Coalition 2008, 4). They cite a study by Budy and Schaller that was focused on Snake River spring/summer Chinook:

> "[E]ven if restoration efforts are large scale (i.e., restoration of many tributary streams) and feasible, if the animal of concern is far ranging with a complex life-cycle, factors in other life stages (e.g., passage through mainstem dams) may provide a bottleneck and limit the overall effectiveness of restoration actions" (Letter of Public Comment, Save Our Wild Salmon Coalition 2008, 4).

Ultimately, to the Save Our Wild Salmon Collation, habitat restoration, though beneficial in some applications, was not the end-all be-all approach for salmon recovery. For them, there were also issues "with the management and ongoing operation of the federal hydropower system" that needed to be addressed (Ibid.).

This summer when the State of the Rockies team visited Rebecca Miles in Lapwai, Idaho she shared similar sentiments about the Fish Accords. She talked to us about the importance of incorporating "a four H" approach in to restoration efforts. The four H's are hydropower, hatchery, harvest, and habitat; four key factors that impact salmon and steelhead in the basin. For Miles, the Accords did not take a balanced approach to handling these influences, as they neglected addressing the full impacts of hydropower (Rebecca Miles, personal communication 2016). As was aforementioned, the Accords bar signing parties from supporting dam breaching or increased spill (MOA 2008). She argued: "no longer can habitat, hatchery and harvest take on the conservation burden and hydro can do whatever it wants" (Rebecca Miles, personal communication 2016). Theodore Kulongoski, the former Governor of Oregon, shared a similar sentiment to Miles' concern that federal agencies were turning a blind eye to the impacts of dams. In a letter of public comment to BPA on the subject of the Fish Accords he wrote:

> "I have long been a proponent of a comprehensive "all-H" strategy to satisfy ESA requirements and lead to recovery. The solution that ultimately ends the litigation and recovers wild fish will be one that places appropriate emphasis on each tool available (hatcheries, habitat, harvest *and hydropower* operations)" (Letter of Public Comment, Kulongoski 2008, 2).

Miles also noted that in the period prior to the Accords, tribal programs funded by BPA through the Northwest Power and Conservation Council, were facing serious funding cutbacks. They were getting "gutted" at the same time that tribes were expending resources on litigation challenging the Biological Opinion. It was during this time when tribes were facing serious financial strain, says Miles, that the "scales started to tip" towards the agreement (Rebecca Miles, personal communication 2016).

Hawley discusses the views of the Nez Perce Tribe who have identified shortcomings in the deal, one critical flaw being that "funding for these endeavors should have been guaranteed anyway" (Hawley 2011, 210). Of the total budget for the Fish Accords, which tallies close to 1 billion dollars, $540 million was allocated for new initiatives. The rest was to ensure the continued funding of projects that were already in the works (Hawley 2011). As Hawley points out, some of the projects that were now "guarantee[d]" to occur under the Fish Accords should have been commitments that were already pledged by BPA as many of the projects appeared as mitigating efforts in the FCRPS Biological Opinion. If these were not sure commitments, then they would not meet the requirements of the ESA. Indeed, in the extensive litigation over the FCRPS Biological Opinion, part of the reason why multiple BiOps have encountered legal scrutiny is because of a certain level of uncertainty surrounding the execution of habitat initiatives. In the 2014 BiOp this continued to be a problem, as Judge Simon writes, "…some of the habitat projects relied on are not reasonably certain to occur" (NWF v. NMFS 2005; NWF v. NMFS 2016, 85).

A letter of public comment from Save Our Wild Salmon Coalition recognized the importance of the tribal projects included in the Accords, but questioned why these initiatives were not being implemented as part of BPA's current legal responsibilities:

> "Of almost $1 billion that will be spent under these MOAs, at least 50% of that money is dedicated towards projects that already receive funding. We are largely supportive of that continued funding and understand the benefit of securing that funding into the future. However, given that BPA believes that these projects are biologically meaningful, deserve funding, and are necessary to fulfill statutory or treaty requirements, BPA should be funding them anyway and not promoting this part of the agreement as anything more than it is: **a promise to continue its existing obligations**" (Letter of Public Comment, Save Our Wild Salmon Coalition 2008, 3).

In the eyes of some, the Fish Accords fulfilled the shortcomings of an underfunded Columbia River Fish and Wildlife Program, a problem, it could be argued, BPA created in the first place. The Fish Accords also

disadvantaged some parties that chose to not sign onto the deal. John Shurts, General Council to the Northwest Power and Conservation Council, said that it has been difficult to provide funding for parties that did not sign onto the Accords, such as the Spokane Tribe (John Shurts, personal communication 2016). Hawley highlights the negotiating advantage of the federal agencies, which he sees as one of "take what we offer you or wind up with nothing" (Hawley 2011, 210). An approach, he asserts, that is not unique in the federal government's treatment of the tribe when it comes to historical agreements. As both Hawley and Miles point out, BPA had a significant brokering advantage in the shaping of the Fish Accords, a deal, which has been criticized for not fully addressing the impact of hydropower along with the other three H's. Years ago when the Fish Accords, were being considered by the tribe, Rebecca Miles responded to a comment from the federal parties suggesting that the Nez Perce Tribe were waiting to sign the Accords in order to receive more funds: "You'll cut my legs off, then offer to sell them back to me only if I come over to your side" she told them (Hawley 2011, 211).

The Glacial Pace of Justice: the Remand of the 2014 Biological Opinion

In early May of 2016 Judge Michael H. Simon, successor to Judge Redden on the U.S. District Court, remanded the most recent attempt at the Biological Opinion for the Federal Columbia River Power System: the 2014 Biological Opinion (NWF v. NMFS 2016). It was the fifth consecutive time that the Federal Columbia River Power System Biological Opinion has been rejected (Profita 2016). The lawsuit ultimately sought to determine if NOAA Fisheries' BiOp met the requirements of the Endangered Species Act. It also examined if the U.S. Army Corps of Engineers (the Corps) and the U.S. Bureau of Reclamation (BOR) were in compliance with the National Environmental Policy Act (NEPA). The BiOp did not hold up against either of these inquiries (NWF v. NMFS 2016).

There were multiple areas within the BiOp that Judge Simon found to be problematic. How the BiOp addressed climate change was one section of concern. He called attention to the fact that NOAA Fisheries seemed to acknowledge its findings that climate change may have a negative effect on some of the BiOp's habitat mitigation initiatives, but did not let it sufficiently inform agency action (NWF v. NMFS 2016).

The court also found the way that NOAA Fisheries made their assessment of habitat benefits to be insufficient. The benefits from these projects lacked a certain tangibility for they "are too uncertain and do not allow for any margin of error" (NWF v. NMFS 2016, 13). The court also criticized NOAA Fisheries' treatment of uncertainty in their evaluations, which allowed them to ignore important warning signs related to species reductions. Judge Simon writes in his 2016 decision:

> "Further, a key measure of survival and recovery employed in the 2014 BiOp already shows a decline, but NOAA Fisheries has discounted this measurement, concluding that it falls within the 2008 BiOp's "confidence intervals." Those confidence intervals, however, were so broad, that falling within them is essentially meaningless" (NWF v. NMFS 2016, 13).

The court is clear in its effort to assert that "there is significant benefit to the listed species from habitat improvement" and points out that the shortcomings of habitat restoration in the BiOp are due to the fact that projects that NOAA Fisheries depends on to satisfy ESA requirements "are not reasonably certain to occur and that NOAA Fisheries relied on habitat mitigation projects achieving the exact amount of extremely uncertain survival benefits required to avoid jeopardy" (NWF v. NMFS 2016, 85). The court is cautious in its approach, as it does not wish to discourage NOAA Fisheries from habitat restoration projects "because they cannot conclusively quantify those benefits...," but for these types of projects to meet the standards of the Endangered Species Act, these projects must be able to show "some amount of survival benefits beyond the minimum survival benefit required to avoid jeopardy..." (NWF v. NMFS 2016, 85-86). It is also important to note that the benefits from these types of habitat mitigation projects, some of which are funded by the Fish Accords, are difficult to quantify and not always instantaneous. For some projects it will be years or perhaps decades before the benefits can be seen (NWF v. NMFS 2016).

The rejection of the FCRPS BiOp yet again may seem like a vicious repetition of the past. There are ways, however, in which this Biological Opinion both echoes the previous rulings of the court, but also departs from prior versions in noteworthy ways (Chasen 2016). The plaintiffs' assertion that the requirements of the National Environmental Policy Act (NEPA) were not being fulfilled was a relatively new development as this particular law had not been used in the case since 2001(NWF v. NMFS 2016). Under NEPA, all federal agencies are obligated to produce an Environmental Impact Statement (EIS), which examines "major Federal actions" that impact the "quality of the human environment" (NWF v. NMFS 2016, 23). In an EIS, it is necessary for agencies to consider "reasonable alternatives" to the proposed action (Ibid.). Judge Simon did not think that the defendants were in compliance with NEPA. He concluded that the EIS that was produced by the U.S. Army Corps of Engineers (the Corps) and the Bureau of Reclamation (BOR) was not up-to-date and no longer relevant. The Corps and BOR leaned on past EISs from 1992, 1993, and 1997 as well as some additional contemporary documents. The court found these to ultimately be outdated and in of need modernization; "For the purposes of compliance with the law, relying on data that is too stale to carry the weight assigned to it may be arbitrary and capricious" (NWF v. NMFS 2016, 17).

Judge Simon identified advances in our understanding of climate change as an important reason why the two agencies could not lean on older assessments in their EIS. He also recognized the production of a current and lawful EIS as a potential avenue for the BiOp to consider modifying dam operations or even dam removal. In the following section he quotes *Thomas v. Peterson* to illuminate his point:

> "a central purpose of an Environmental Impact Statement is "to force consideration of environmental impacts in the decision-making process." For example, the option of breaching, bypassing, or even removing a dam may be considered more financially prudent and environmentally effective than spending hundreds of millions of dollars more on uncertain habitat restoration and other alternative actions" (NWF v. NMFS 2016, 18).

As Chasan points out, the judge did not instruct the defendants to examine the possibility of dam breaching directly, but his language clearly indicates that he thinks it is a good idea. Attorney for Earthjustice, Steven Mashuda, says that it would be hard for the agencies to make a sensible defense for not including that option in an EIS, "they have to come up with some explanation why it's reasonable to not even consider it. I can't imagine how they could justify it" (Chasan, 2016).

Douglas MacDougal, a water resource, energy, and litigation lawyer at the Marten Law firm, grapples with a question common for those who have examined NOAA Fisheries long and arduous attempt to produce a Biological Opinion. Why has it been so challenging for NOAA Fisheries to meet the standards of the law? One of the reasons may be the mere size of the geographical area that the BiOp seeks to cover. It is an intricate and convoluted system and salmonids do not merely spend their life in one place, they travel vast distances and face many environmental pressures (MacDougal 2016). MacDougal also points to "the elephant in the room"—the dams. Do salmonids have a fighting chance on a dammed river? Is there some way in which these longtime foes can coexist? MacDougal gets to the heart of the question that has long been asked on the Columbia: "Can we have dams and fish too? The clear overriding message of Simon's opinion is that agencies *must* come to grips with this fundamental question" (Ibid.).

In Judge Simon's 2016 ruling over the 2014 Biological Opinion, he recounts the BiOp's long and troubled history, which has clamored on for more than two decades. He shares the remarks of a former U.S. District Judge, who declared that the nominal effort by NOAA Fisheries in their 1993 FCRPS Biological Opinion was not sufficient and preserved the "status quo" when the circumstance "cries out for a major overhaul" (NWF v. NMFS 2016, 7). He also reminded the defendants of Judge Redden's continued prompting to examine the possibility of breaching a dam, or even multiple dams on the Snake River. In May of 2016, Judge Simon recognized the 2014 BiOp as a perpetuation of a stagnant approach to controlling for the impacts that the dams have on salmon and steelhead:

> "Judge Redden, both formally in opinions and informally in letters to the parties, urged the relevant consulting and action agencies to

> consider breaching one or more of the four dams on the Lower Snake River. For more than 20 years, however, the federal agencies have ignored these admonishments and have continued to focus essentially on the same approach to saving the listed species—hydro-mitigation 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. Many populations of the listed species continue to be in a perilous state. The 2014 BiOp continues down this same well-worn and legally insufficient path taken during the last 20 years." (NWF v. NMFS 2016, 18-19).

From the perspective of the courts, it is clear that habitat focused mitigation projects, initiatives that were funded in part by the Accords, are not enough to fully support fish recovery efforts in the Basin and meet the requirements of the Endangered Species Act (MOA 2008). Judge Michael H. Simon ends his opinion and order with his instructions for the federal defendants. He writes:

> "No later than March 1, 2018, NOAA Fisheries is directed to file with the Court its new Biological Opinion. The Court retains jurisdiction over this matter to ensure that the Federal Defendants: (1) develop appropriate mitigation measures to avoid jeopardy; (2) produce and file a Biological Opinion that complies with the ESA and APA; and (3) prepare an EIS that complies with NEPA. **IT IS SO ORDERED**" (NWF v. NMFS 2016, 149).

Conclusion

The Fish Accords ushered in a new era of compromise, enabled funding for important fish recovery projects, and provided financial security and opportunities for long-term planning for the signatories. There was also disaccord in the Columbia River Basin, however, as some were critical of the agreement and the circumstances under which they were negotiated. For some, the Fish Accords were seen as a limited attempt to address the multiple factors that impact salmon and steelhead, a perspective that was backed by the U.S. District Court of Oregon. The remand of the 2014 BiOp suggests that the federal agencies may need to address what they sought to avoid in the Fish Accords and what NOAA Fisheries has been tiptoeing around in their extensive BiOp litigation: the examination of possible dam removal. Judge Simon's ruling on the 2014 BiOp as unlawful as well as his frank comments regarding the federal agencies continued failure to consider modernizing dam operations or breaching have reinvigorated salmon advocates to press the federal government for the removal of the Lower Four Snake River Dams (The Associated Press 2016). The Nez Perce Tribe has not wavered from their stance on the Snake River Dams; ultimately they are confident that the most effective way to revitalize salmon and steelhead populations is to take them out (Public News Service, 2016).

It is unclear what the Fish Accord members will choose to do in 2018, when the Accords expire. From the perspective of the United States District Court of Oregon, however, although habitat projects and sub-basin initiatives are important and do have practical application, the compromise has done little to dislodge the "status quo" that has dominated salmon policy for so long in the Columbia River Basin (NWF v. NMFS 2016, 19). It seems that perhaps the first step to dislodging this legacy is for NOAA Fisheries to produce a Biological Opinion that meets the requirements of the law, ensuring that the federal government's legal responsibilities, which include its treaty obligations, are upheld. The waiting game for the next Biological Opinion has begun again. If the past is any indicator of the future, however, it is clear the wheels of justice turn slowly.

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