The Role of the Judge in Endangered Species Act Litigation: District Judge James Redden and the Columbia Basin Salmon Saga

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THE ROLE OF THE JUDGE IN ESA IMPLEMENTATION: DISTRICT JUDGE JAMES REDDEN AND THE COLUMBIA BASIN SALMON SAGA

By
Michael C. Blumm* & Aurora Paulsen**

After rejecting three federal biological opinions (BiOps) for favoring federal Columbia Basin hydroelectric operations over salmon protected by the Endangered Species Act (ESA), Judge James A. Redden has retired, passing oversight of the litigation to a new federal judge. This complex case, which concerns the accommodations the world’s largest hydropower system must give to the region’s signature natural resource, has now spanned nearly twenty years and five different BiOps. For his part, Judge Redden worked closely with the parties in an attempt to arrive at improvements in salmon survival. In this managerial role, he acted perhaps as the archetypical federal judge in public law litigation sketched long ago by Harvard Professor Abraham Chayes. Judge Redden leaves behind giant shoes that will be difficult to fill: a willingness to stand up to virtually all the most powerful interests in the region involved in hydropower generation, navigation, and the trade on the Columbia River—some of the most formidable lobbies in the Pacific Northwest—in addition to the federal agencies urging him to defer to their expertise. This article provides background on the clash between hydropower operations and salmonids and discusses Judge Redden’s review of the Columbia Basin BiOps over the past decade. It then reviews concepts of judicial management of complex public litigation such as the Columbia River salmon saga and concludes that continued close judicial oversight will be necessary if the salmon are to recover from the damage inflicted by the federal Columbia River hydropower system.

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I. INTRODUCTION

The long-running controversy over salmon migration in the Columbia River reached another milestone in 2011, when federal district court judge James A. Redden once again rejected the federal biological opinion (BiOp) governing hydroelectric operations that adversely affect endangered salmon.¹ This rejection marked the third time that Judge Redden found the government’s effort to protect salmon inadequate to avoid jeopardy to the listed species.² This time, however, instead of remanding the entire BiOp, he bifurcated his opinion, allowing the proposed ten-year BiOp to control river operations through 2013 but ordering a new one in

2014.³ Judge Redden then withdrew from the legal controversy he had judged for a decade and, at age 82, retired from the case.⁴

Despite Judge Redden’s prudent oversight, the fate of listed Columbia River salmon remains very much in peril, as powerful federal agencies led by the Bonneville Power Administration continue to resist the fundamental changes to the hydroelectric system that both Judge Redden and his predecessor suggested were necessary.⁵ As a result, wild runs of Columbia Basin salmon are now just one-half of what they were thirty years ago, when the 1980 federal Northwest Power Act called for restoring the salmon runs and treating salmon migration and

³ See infra note 309 and accompanying text.
⁵ Judge Redden’s last opinion ordered a revised government BiOp that would “consider[,] whether more aggressive action, such as dam removal and/or additional flow augmentation and reservoir modifications are necessary to avoid jeopardy.” NWF v. NMFS IV, 2011 WL 3322793, at *10. Recently, speaking extrajudicially, he suggested that the long-term solution to the salmon saga was the removal of four lower Snake River dams, which are the Ice Harbor, Lower Monumental, Little Goose and Lower Granite: “I think we need to take those dams down. . . . I’ve never ordered (federal agencies) or even tried to order them that you gotta take those dams down. But I have urged them to do some work on the dams (to improve prospects for salmon), and they have done (so).” Scott Learn, Judge James Redden: ‘We need to take those (Snake River) dams down’, THE OREGONIAN (Apr. 25, 2012), http://www.oregonlive.com/environment/index.ssf/2012/04/judge_james_redden_we_need_to.html. See also Brooklyn Baptiste, Balancing Power Needs and the Environment: What James Redden Says on Salmon Recovery Still Matters, THE OREGONIAN (May 04, 2012, 5:00 a.m.), http://www.oregonlive.com/opinion/index.ssf/2012/05/balancing_power_needs_and_the.html (“Redden’s comments reminded the tribe how much it respected his integrity and fearlessness. . . . Judges like Redden, acting with independence given to them by the U.S. Constitution, provide a measure of confidence that decisions won’t be based on political calculation or power, but on the requirements of existing law. Redden’s courage was evident throughout 10 years of handling an extraordinarily complex lawsuit with unwavering independence and care.”).

Judge Redden’s predecessor, Judge Malcom Marsh, voiced similar sentiments many years earlier. In striking down the government’s first attempt to conform Columbia River operations to the requirements of the ESA in 1994, Judge Marsh stated that small, incremental steps would not satisfy the ESA because “the process is seriously, ‘significantly’ flawed because it is too heavily geared towards a status quo that has allowed all forms of river activity to proceed from a deficit situation . . . when the situation literally calls out for a major overhaul.” Idaho Dep’t of Fish & Game v. Nat’l Marine Fisheries Serv., 850 F.Supp. 886, 900 (D. Or. 1994). See infra notes 83–96 and accompanying text for a discussion of Judge Marsh’s first review of a hydropower BiOp.
hydropower generation on a coequal basis. This failure to restore salmon runs has occurred despite the cumulative expenditure of some $10 billion.

This astonishingly poor record of implementing what is generally thought to be the nation’s most protective environmental law is due largely to the federal government’s persistent unwillingness to significantly change hydroelectric operations or reconfigure the system to benefit migrating salmon. Instead, the government has engaged in a kind of “bait and switch” approach of investing heavily in habitat rehabilitation, about which Judge Redden expressed “serious reservations.” So, despite a mountain of paperwork and several rounds of failed BiOps, the sorry salmon saga will continue for another round of BiOps that will be reviewed by a different federal judge. Judicial calls for a “major overhaul in system operations,” first heard nearly two decades ago, may continue along with claims that the federal government is practicing deception, or worse, in its attempts to implement the Endangered Species Act (ESA).


8 According to Professor Cheever, “[a]lthough it does not protect biological diversity as such, the Endangered Species Act is one of the world’s most powerful species preservation laws and has proved a potent tool for stopping, or at least delaying, projects that create a significant, readily identifiable threat to biological diversity.” See Federico Cheever, The Road to Recovery: A New Way of Thinking about the Endangered Species Act, 23 ECOLOGY L.Q. 1, 2 (1996).

9 NWF v. NMFS IV, 2011 WL 3322793, at *9 (noting that while habitat improvement “is vital to recovery,” he was troubled by the lack of scientific support for the government’s salmon survival predictions, citing skepticism expressed by independent scientists).

10 Judge Michael Simon, appointed to the bench by President Obama and confirmed by the U.S. Senate in 2011, will replace Judge Redden. Notice of Judicial Reassignment, Nov. 28, 2011, ECF No. 1882 (Case No. 3:01-cv-00640-SI).

11 See supra note 5 (Judge Marsh’s statement).

12 See Michael C. Blumm, Erica J. Thorson & Joshua D. Smith, Practiced at the Art of Deception: The Failure of Columbia Basin Salmon Recovery under the Endangered Species Act, 36 ENVTL. L. 709 (2006) [hereinafter cited as Practicing Deception]. Steven Hawley has suggested that the startling poor results per dollar expended are due to “a skillfully directed symphony of public relations scams, filthy politics, and crooked science.” Hawley, supra note 7, at 144.
Judge James Redden stepped into this controversy a decade ago, when he succeeded Judge Malcolm Marsh of the U.S. District Court of Oregon. Judge Redden proceeded to find the government’s 2000 BiOp inadequate, and he did so again concerning its 2004 BiOp. Even after the government managed to buy off several of the plaintiffs, he was unwilling to approve a BiOp in 2011 that would have granted the government ten years of litigation-free implementation. Because Judge Redden provided a skeptical review of government claims of expertise, gave credence to scientific sources critical of the government’s claims, and was apparently unwilling to allow the government to prevail by purchasing the support of much of the opposition, he was perhaps the archetypical federal judge in public law litigation, as portrayed long ago in an article by Harvard Professor Abraham Chayes. Judge Redden thus leaves behind giant shoes that will be difficult to fill: demonstrating a willingness to stand up to virtually all the most powerful interests in the region involved in hydropower generation, navigation, and trade on the Columbia River, some of the most formidable lobbies in the Pacific

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13 Judge Redden was appointed to the federal bench by President Carter in 1980 and assumed senior status in 1995. Prior to his appointment to the bench, he graduated from Boston College Law School, practiced law for seventeen years in Medford, Oregon, where the federal courthouse is named for him, served for six years in the Oregon House as a Democrat, and was both the state’s Treasurer (1973–1976) and Attorney General (1977–1980).


16 See Michael C. Blumm & Hallison T. Putnam, Imposing Judicial Restraints on the “Art of Deception”: The Courts Cast a Skeptical Eye on Columbia Basin Salmon Restoration Efforts, 38 ENVTL. L. 47, 57–62 (2008) (reporting the story of how the Bonneville Power administration tried to eliminate funding for the Fish Passage Center (FPC), a group established by the Northwest Power and Conservation Planning Council in 1982 to help fulfill the Northwest Power Act’s dual goals of protecting Columbia Basin fish and wildlife and assuring the Pacific Northwest an adequate and reliable power supply, when the Fish Passage Center advocated spill as a way to increase salmon survival) [hereinafter Imposing Judicial Restraints].


18 See, e.g., infra note 246 and accompanying text.

19 See Abraham Chayes, The Role of the Judge in Public Law Litigation, 89 HARV. L. REV. 1281 (1976) (suggesting that in public law litigation, judges should play a more active role in shaping of claims, discovery, inter-party negotiations, the issuance of decrees, and monitoring of litigants' compliance with the court's orders).
Northwest,\textsuperscript{20} to say nothing of the federal agencies urging him to defer to their expertise, including the agency responsible for ESA implementation.\textsuperscript{21}

This article discusses Judge Redden’s review of Columbia Basin BiOps over the last decade. Part II provides background on the clash between hydropower operations and salmonids, including a brief overview of the ESA. Part III evaluates Judge Redden’s review of the 2000 BiOp—a product of the Clinton Administration—which was his first opportunity to examine the federal government’s approach to avoiding species jeopardy for listed salmon, as required by the ESA. Part IV considers the judge’s evaluation of an ensuing 2004 BiOp—this one advanced by the Bush Administration—which the judge also found wanting. Part V focuses Judge Redden’s consideration of the 2008 BiOp—originally proposed by the Bush Administration and reissued with only minor modifications by the Obama Administration in 2010—which he concluded also failed to satisfy the ESA. Judge Redden’s final decision is perhaps the most telling, for it illustrates the importance of the role that the federal judiciary can play in combating the interest-group politics that is so evident in the Columbia Basin salmon saga. Part VI provides an overview of the concepts of “managerial judging” and public law litigation and discusses the judge’s important role in overseeing the hydropower BiOps. The article concludes by suggesting that the fate of the imperiled Columbia Basin salmon runs rests uneasily in the hands of Judge

\textsuperscript{20} Defendant-intervenors have included the states of Idaho and Montana, as well as influential groups such as the Northwest Requirement Utilities, the Pacific Northwest Generating Cooperatives, the Industrial Customers of Northwest Utilities, Alcoa, Inc., the International Association of Machinists & Aerospace Workers, the Northwest Irrigation Utilities, the Public Power Council, the BPA Customer Group, the Washington State Farm Bureau Federation, the Franklin County Farm Bureau Federation, the Grant County Farm Bureau Federation, the Clarkson Golf & Country Club, the Kootenai Tribe of Idaho, and the Inland Ports and Navigation Group. See Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., 524 F.3d 917 (9th Cir. 2007); NWF v. NMFS III, 2005 WL 1278878; Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv. (NWF v. NMFS I), 254 F. Supp. 2d 1196 (D. Or. 2003).

\textsuperscript{21} See generally Practicing Deception, supra note 12. The ESA implementation agency in the case of Columbia Basin salmon is the National Oceanic and Atmospheric Administration (sometimes referred to as NOAA-Fisheries or the National Marine Fisheries Service). The surprising transformation of this agency from a salmon protector to a hydropower defender of status-quo operations is portrayed in Michael C. Blumm & Greg Corbin, \textit{Salmon and the Endangered Species Act: Lessons From the Columbia Basin}, 74 WASH. L. REV. 519, 591–92 (1999) [hereinafter \textit{Salmon and the Endangered Species Act}].
Redden’s successor, as it is hardly clear that the skepticism that Redden so ably deployed will continue.

II. THE CLASH BETWEEN HYDROPOWER AND SALMON

The salmon runs in Columbia River Basin were once the largest in the world, prompting Meriwether Lewis to assert in 1805 that “the multitudes of this fish are almost inconceivable.” However, beginning in the 1930s, water project development severely compromised salmon’s migratory paths. To the great detriment of salmon, by the late twentieth century, 150 dams had harnessed the Columbia in the name of flood control, navigation, irrigation, and hydropower, creating the largest interconnected hydroelectric system in the world.

The world’s largest salmon runs did not fare well as a result of the development and operation of that system, which changed the very essence of the Columbia River Basin. In effect, salmon populations along the river drastically reduced the size of salmon runs. This article will refer to “salmon” throughout, but the threatened and endangered species that are its focus consist of both salmon and steelhead, a group technically referenced as “salmonids.” A primary difference between steelhead and salmon is that, unlike salmon, steelhead do not die after spawning and therefore may navigate between the ocean and spawning grounds more than once.

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23 See Blaine Harden, A River Lost: The Life and Death of the Columbia 63 (1996).
24 Even before dams lined the Columbia River, overfishing facilitated by new technologies and increased populations along the river drastically reduced the size of salmon runs. See Columbia River Basin, supra note 22, at 11 (observing that novel fishing practices began to deplete salmon runs by the 1880s, and that “[t]he 1883 chinook catch of forty-three million pounds has never again been matched”). However, it is dams and other aspects of water development on the river that have pushed many populations of salmon to the brink of extinction. See id. at 88 (stating that “[a]lthough it is true that salmon habitat has been damaged by logging, grazing, and mining, the predominant cause of the decline of most Columbia Basin salmon runs is the development and operation of the largest interconnected hydroelectric system in the world”).
25 This article will refer to “salmon” throughout, but the threatened and endangered species that are its focus consist of both salmon and steelhead, a group technically referenced as “salmonids.” Nat’l Oceanic & Atmospheric Admin. Salmon Populations, NOAA (Aug. 15, 2011), http://www.nwr.noaa.gov/ESA-Salmon-Listings/Salmon-Populations/.
26 See id. at 4.
28 See Columbia River Basin, supra note 22, at 87.
29 See Sacrificing the Salmon, supra note 27, at 88. The Columbia River Basin produces more than forty percent of the nation’s hydropower. See id. at 87.
the dams turned a mighty river that flows 1,200 miles and drains an area larger than France into a series of large reservoirs. Now, although previously traversing 109 waterfalls, the Columbia River flows freely in only two places. As author William Dietrich has maintained, the Columbia “is a river not so much transformed as seemingly invented. If you want to see how America dreamed at the height of the American Century, come to the Columbia.” But the manifestation of this dream came at an extremely high cost: chinook salmon and steelhead are now extinct throughout more than fifty percent of their historic range east of the Cascades, and just two percent of Columbia Basin’s watersheds have strong salmon runs. Of historical salmon losses in the Columbia Basin, approximately eighty percent can be attributed to hydropower development and operation.

A. Minimizing and Compensating for Salmon Mortality

Transforming rivers in the Columbia River Basin into what are essentially reservoirs has had numerous deleterious effects on salmon populations. The dams increase water

30 See id. (identifying the Columbia River as “the defining natural resource of the Pacific Northwest,” and observing that “[t]he Columbia is the West’s biggest River system, with the force to pierce the Cascades. The Columbia has seven times the flow of the Colorado, two hundred times that of the Rio Grande.” Id.
31 See Don Gayton, “Ghost River”: The Columbia, 1 B.C. J. OF ECOSYSTEMS & MGMT. 2, 2 (2001) (referring to the Columbia River as the “Ghost River,” and asserting that his “culture . . . has chosen to turn the Columbia into a series of industrial reservoirs (to call them ‘lakes’ is a grievous misuse of the word) and then play God with its salmonid ecology.”); Harden, supra note 23, at 71 (referring to the water between dams on the Columbia River as “tepid and sluggish reservoirs”).
32 Daniel J. Rohlf, Lessons from the Columbia River Basin: Follow the Blueprint but Avoid the Barriers, 19 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 195, 196 (2006) (“The Columbia itself, which once raged over 109 major falls and rapids, now runs free in only two places: one in the United States and one in Canada.”).
33 SeeWilliam Dietrich, NORTHWEST PASSAGE: THE GREAT COLUMBIA RIVER 46 (1995). See also Harden, supra note 23, at 75 (“Indeed, it is silly to pretend that the Columbia is a river in the sense that Lewis and Clark understood it. The river was killed more than sixty years ago and was reborn as plumbing.”).
34 See Columbia River Basin, supra note 22, at 88.
temperatures,\textsuperscript{36} cause greater predation of juvenile salmon,\textsuperscript{37} and significantly lengthen the time it takes for juvenile salmon to migrate downriver, which is problematic because salmon are biologically programmed to develop into saltwater animals during a particular timeline as they travel, preparing themselves for survival in the ocean.\textsuperscript{38} Further, dams present serious physical obstacles to salmon attempting to navigate both up and downriver.\textsuperscript{39}

Those managing the hydroelectric system in the Columbia Basin have attempted to minimize or compensate for the harm dams cause to salmon populations, but their efforts have had only mixed success.\textsuperscript{40} For example, some dams have been equipped with ladders, locks, traps, elevators, and bypass canals; however, those measures have not reversed the overall decline of Columbia Basin salmon runs.\textsuperscript{41} In fact, despite bypass devices, up to ninety-one percent of juvenile salmon face mortality while traveling downriver.\textsuperscript{42} Since reducing the juvenile mortality rate is key to recovering listed salmon species, changing dam operations could

\begin{itemize}
  \item \textsuperscript{36} See Craig Johnston, \textit{Salmon and Water Temperature: Taking Endangered Species Seriously in Establishing Water Quality Standards}, 33 \textit{ENVT. L.} 151, 153 (2003) (asserting that increasing water temperatures contribute significantly to salmonids’ decline).
  \item \textsuperscript{37} See Harden, \textit{supra} note 23, at 71 (reporting that salmon going through turbines are stunned, making them easier prey).
  \item \textsuperscript{38} See id. (observing that “as the swim downstream, juvenile[] salmon] undergo physical changes that allow them to breathe in saltwater. The timing of this transformation is delicate and easily disrupted. Before there were dams, young fish could reach the sea in less than a month. In slackwater, it can take two to three months.”).
  \item \textsuperscript{39} See \textit{Columbia River Basin, supra} note 23, at 30; Harden, \textit{supra} note 23, at 71 (“The problem with salmon actually swimming in the dammed-up river is that, sooner or later, they have to brave a turbine. A Snake River salmon has to pass through eight sets of turbines, four in the lower Snake, four in the middle and lower Columbia. Each turbine on the river kills between [ten] and [fifteen] percent of the fingerling juvenile salmon that get sucked into it. Turbines do not puree these small salmon, rather they kill by creating violent pressure changes that can explode a salmon’s swim bladder. The combined effect of eight dams kills at least three of every four young salmon migrating from Idaho to the sea. Salmon not killed [by the dams] are often stunned, making them easy prey for seagulls and predator fish who hang out behind McNary and other dams.”) (emphasis in the original).
  \item \textsuperscript{40} See also \textit{Columbia River Basin, supra} note 22, at 31–34 (discussing attempts to salmon mortality caused by hydroelectric operations, but asserting that salmon populations have continued to decline).
  \item \textsuperscript{41} See id. at 31 (“Bonneville Dam, completed in 1938, included an elaborate system of fish ladders, locks, traps, elevators, and bypass canals to permit upstream migrating adult salmon to ascend the height of the dam and reach their spawning grounds upstream. However, such bypass devices were not feasible at every dam, and some that were built proved unsuccessful. Also, adult fish ladders do not aid juvenile fish migrating downstream, which suffer mortalities due to turbine passage, delay due to low water flows, and predation in reservoirs.”); John M. Volkman, \textit{How Do You Learn from a River?: Managing Uncertainty in Species Conservation Policy}, 74 \textit{WASH. L. REV.} 719, 726–27 (1999) (stating that “the problem of fish passage at high dams proved to be insurmountable”).
  \item \textsuperscript{42} See \textit{Practicing Deception, supra} note 12, at 728 (citing THE INDEP. SCIENTIFIC GROUP, \textit{RETURN TO THE RIVER} 235, 299 (2000)).
\end{itemize}
increase salmon’s survival rates—but that would cause some power losses. Consequently, to avoid diminished power production, the government has chosen to gather juvenile salmon into trucks or barges for transport downriver as a primary method of avoiding salmon mortality caused by the dams.

Another attempt to mitigate the damage caused by Columbia Basin dams has been to compensate for the loss of salmon runs by supplementing stocks with tens of millions of hatchery fish each year. The result is that hatchery salmon have now largely replaced Columbia Basin wild salmon: indeed, some salmon runs now consist of more than eighty percent hatchery fish. The roughly 130 million hatchery fish released every year do not perform well in the wild, and they have damaged salmon populations by transmitting disease, outcompeting

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43 See Practicing Deception, supra note 12, at 728 (asserting that “[d]am operators, favoring mitigation that interferes minimally with power production, support barging and trucking salmon and maintain that the efficacy of the transportation program has not yet been undermined by clear scientific proof and continuously declining salmon runs. This successful shifting of the burden of proof to those advocating for salmon—in this case being forced to prove a nearly impossible negative—is commonplace in Columbia Basin salmon/hydropower tradeoffs.”).

44 See Columbia River Basin, supra note 22, at 46. Many states, tribes, scientists, and salmon advocates oppose transport and favor some combination of flow improvements and spill, pointing to statistics indicating that transport causes more juvenile mortality than in-river migration. See Practicing Deception, supra note 12, at 729.

45 See id. at 724 (stating that salmon populations “are heavily supported by hatchery fish”); Harden, supra note 23, at 74 (claiming that “state and federal fish hatcheries on the Columbia-Snake system seed the rivers with tens of millions of [hatchery fish] throughout the spring and summer”).

46 See Volkman, supra note 41, at 727 (referring to the introduction of hatchery fish as a “mechanistic approach[]” and explaining that, “We assumed that if we did enough of these things we could fix the problem. This idea has appeal in a political system that is disinclined to push restrictions on humans.”).


48 See Columbia River Basin, supra note 22, at 102.

49 According to one article, “[f]isheries biologists have known for years that hatchery-reared individuals show substantial deficits in virtually all aspects of their behaviour.” Culum Brown & Rachel L. Day, The Future of Stock Enhancements: Lessons for Hatchery Practice from Conservation Biology, 3 Fish & Fisheries 79, 82 (2002). For example, foraging and predator evasion behaviors are learned from prior experience, but for hatchery fish, raised in unnatural conditions, those behaviors are poorly developed and insufficient to cope with life in the wild.” Id. at 83. Further, the wild fish, with which hatchery fish interbreed, inherit the hatchery fish’s poor performance in the wild. According to one 1999 study, statistics “imply that supplementation (wherein wild fish interbreed with hatchery fish of reduced fitness) will reduce the productivity of naturally spawning populations, and often may compromise conservation objectives,” and a decline in survival “suggests that the fitness of the next generation would be low even before interbreeding with more hatchery fish, and that continuous supplementation should progressively diminish the productivity of the naturally spawning population.” R. R. Reisenbichler & S. P. Rubin, Genetic Changes from Artificial Propagation of Pacific Salmon Affect the Productivity and Viability of Supplemented Populations, 56 J. of Marine Sci. 459, 464 (1999).
wild salmon for food, jeopardizing the integrity of wild populations through interbreeding, and sometimes preying on smaller wild salmon.\textsuperscript{50}

Improvements in hatchery programs may reduce some of these harms. For example, in 1995, four Columbia Basin treaty tribes with fishing rights—the tribes of the Umatilla, Yakama, and Warm Springs reservations and the Nez Perce tribe—released \textit{The Spirit of the Salmon}, a comprehensive salmon plan that advocated supplementation of natural salmon stocks with hatchery fish.\textsuperscript{51} Unlike earlier hatchery management, the tribes’ plan stated that their hatcheries would simulate natural conditions to ensure that hatchery fish are managed as one gene pool.\textsuperscript{52} However, although improving hatchery programs may increase salmon survival, clearly more is required if we are to bring some species back from the brink of extinction.

\textbf{B. Listing Salmon under the Endangered Species Act}

In 1980, Congress responded to the decline in wild salmon runs by including a major salmon restoration project in the Northwest Power Act.\textsuperscript{53} In that statute, Congress went so far as to elevate salmon to “coequal partner” status with hydropower in the operation of dams in the Columbia River Basin.\textsuperscript{54} However, despite this attempt at system-wide protection, salmon runs


\textsuperscript{52} \textit{Columbia River Inter-Tribal Fish Comm’n}, \textit{supra} note 51, at v–vi.

\textsuperscript{53} \textit{16 U.S.C. § 839b(h)}. However, “Congress first expressed concern about the potential effects of Columbia River hydropower operations on salmon as long ago as 1937, when it enacted the Bonneville Power Act.” See id. § 832a; \textit{Practicing Deception}, supra note 42, at 715.

continued their precipitous decline.\textsuperscript{55} Because the Northwest Power Act failed to accomplish its objective of putting salmon protection on par with hydropower interests,\textsuperscript{56} in 1990, citizens

\textsuperscript{55} See Columbia River Basin, supra note 22, at 4 (observing that the restoration program provided under the Northwest Power Act was not sufficient to keep salmon from being listed under the ESA in the early 1990s). See also Sacrificing the Salmon, supra note 27, at 45–52 (discussing the status of declining salmon populations), 173 ( remarking that “in 1991, the American Fisheries Society’s Endangered Species Committee reported a Pacific Coast-wide salmon crisis: 101 naturally spawning salmon species faced ‘a high risk of extinction;’ another 58 had a ‘moderate risk of extinction;’ and 54 more were judged to be of ‘special concern.’ About one-third of those fish runs were in the Columbia Basin.”).

\textsuperscript{56} See, e.g., Michael C. Blumm & Andy Simrin, The Unraveling of the Parity Promise: Hydropower, Salmon, and Endangered Species in the Columbia Basin, 21 ENVTL. L. 657, 660–61 (1991) [hereinafter Unraveling Parity] (“The Northwest Power Act promised that fish and wildlife would be treated ‘on a par’ with other river uses, as a ‘co-equal partner’ with hydropower. Consequently, the two federal fishery agencies suspended their status review in 1981 to allow the Act’s protective measures to take effect. . . . Ten years later, the fruits of the Northwest Power Act failed to prevent a number of ESA listing petitions, and NMFS reinstated ESA status reviews of five Columbia Basin stocks in 1990.”) [hereinafter The Unraveling of the Parity Promise].
began petitioning to list species of salmon under the ESA. By 2005, the National Oceanic and Atmospheric Administration (NOAA) had listed thirteen Columbia Basin salmon runs.

Under the ESA, often referred to as the “law of last resort” for severely compromised species, listing results if NOAA or the U.S. Fish and Wildlife Service (FWS) determines that a species or subspecies is “threatened” or “endangered.” For vertebrate fish and wildlife, Congress defined “species” to include “distinct population segment[s]” in order to protect “significant” populations that are important to a species’ overall survival. Although providing protections to groupings below the species level had previously been relatively uncontroversial,

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58 NOAA Fisheries was formerly the National Marine Fisheries Service (NMFS), a subagency of NOAA. This article will refer to NOAA rather than NMFS for the sake of consistency.

59 NOAA oversees protection of Pacific salmon, due to its life cycle that includes the marine environment, while FWS is responsible for protection of freshwater and terrestrial species. See Rohlf, supra note 57, at 618.

60 A species is listed as “endangered” when it is “in danger of extinction throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6). A “threatened” species is one that is “likely to become an endangered species within the foreseeable future.” Id. § 1532(20).


62 See Columbia River Basin, supra note 22, at 71.


64 See Salmon and the Endangered Species Act, supra note 21, at 74.
disagreement over providing ESA protections for Pacific salmon runs prompted NOAA and FWS to reconsider listing salmon populations as distinct population segments.66 After some deliberation, NOAA developed a new concept of an “evolutionarily significant unit” (ESU) to determine whether there is a distinct population segment of Pacific salmonids eligible for listing.67 To be considered an ESU, a population must meet two criteria: (1) it must be “substantially reproductively isolated from other conspecific population units,” and (2) it must “represent an important component in the evolutionary legacy of the species.”68

Listing a species prohibits federal agencies from proceeding with actions that are likely to jeopardize that species or adversely modify its critical habitat.69 To ascertain whether an action jeopardizes a listed species or adversely modifies critical habitat, an agency must decide whether its proposed action has a possible effect on that species or critical habitat.70 For Columbia Basin hydroelectric operations, the action agencies are the Bonneville Power Administration (BPA), the U.S. Army Corps of Engineers, and the Bureau of Reclamation.71 If one of those action agencies determines that there is a possible effect, it must prepare a biological assessment to evaluate the effects.72

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66 See Rohlf, supra note 57, at 620.
67 Policy on Applying the Definition of Species Under the Endangered Species Act to Pacific Salmon, 56 Fed. Reg. 58,612, 58,612 (Nov. 20, 1991). The concept of an ESU has significantly influenced NOAA’s listing decisions by providing a reason to reject ESA protection for certain salmon runs. For example, citing the possibility of significant gene flow between two salmon runs, the agency has declined to list one run, or has lumped two runs together. See Salmon and the Endangered Species Act, supra note 21, at 528 n.50 (providing examples of rejections of listing for salmon runs based on the ESU concept).
69 16 U.S.C. § 1536(a)(2) (describing an “agency action” as an action carried out by a federal agency). The ESA does not define “jeopardy,” but an ESA regulation defines “jeopardize as “engag[ing] in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02 (2005).
70 16 U.S.C. § 1536(c)(1).
72 16 U.S.C. § 1536(c)(1).
Where a biological assessment indicates that the proposed action is not likely to adversely affect the listed species or its critical habitat, the agency may proceed without formal consultation if NOAA concurs in writing. However, even when the NOAA makes a no jeopardy conclusion, the agency must provide a written statement (known as an Incidental Take Statement (ITS)) if the action would result in any “take” of the species. The ITS must: (1) identify the impact of the incidental taking on the species; (2) specify the “reasonable and prudent measures” to minimize such impact; (3) set forth terms and conditions governing implementation of the reasonable and prudent measures; and (4) establish the procedures that it will use to handle or dispose of any animals that are taken. Action agencies that comply with the terms and conditions of an ITS are exempt from penalties for takings of listed species or harm to their habitat.

If a biological assessment of a proposed action suggests that the action is likely to result in an adverse effect, the agency must initiate a formal consultation on the effects, resulting in a BiOp made available to the public. In this BiOp, NOAA or FWS must explain how it arrived at its determination and may suggest reasonable and prudent alternatives as mitigation measures to

73 50 C.F.R. § 402.13(a). In theory, the action agency has an independent duty to comply with the no jeopardy requirement, regardless of whether NOAA has done a BiOp. That is, section 7 of the ESA applies to (1) an “agency action,” that (2) “may affect” listed salmon. See, e.g., Peter M. Lacy, The Irrigated Desert and Imperiled Salmon: “Reclaiming” Illegally Spread Water via the Endangered Species Act, 4 U. DENV. WATER L. REV. 351, 369 (2001) (“[T]he action agency has an independent duty to comply with the no jeopardy requirement. Unless the action agency is granted an incidental ‘take’ exemption, section 7(a)(2) requires assurance that a proposed action ‘is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat.’ The test for a finding of jeopardy asks whether the action ‘reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species.’ Therefore, for the [Bureau of Reclamation’s] failure to control water spreading to fall within the purview of section 7, a plaintiff must establish that water spreading amounts to (1) an ‘agency action,’ that (2) ‘may affect’ listed salmon.”).
74 16 U.S.C. § 1536(b)(4), (o). See also Arizona Cattle Growers’ Ass’n v. U.S. Fish & Wildlife, 273 F.3d 1229, 1233 (9th Cir. 2001) (concluding that ITSs were arbitrary and capricious because they “fail[ed] to properly specify the amount of anticipated take and to provide a clear standard for determining when the authorized level of take has been exceeded”). Under the ESA, the term “take” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19).
75 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i).
77 50 C.F.R. § 402.14 (providing the regulations for formal consultation).
keep the action from resulting in jeopardy or adverse modification to critical habitat. Thus, the ESA mandates ostensibly significant protections for listed species.

C. Pre-Redden Review of Hydropower BiOps

The numerous BiOps occasioned by hydropower operations in the Columbia River Basin have been the subject of contention for almost twenty years. In 1992, shortly after listing Snake River sockeye and chinook, NOAA issued its first BiOp on hydroelectric operations in the Columbia Basin. In this early BiOp, NOAA concluded not only that 1992 operations would not jeopardize the continued existence of listed salmon, but also that operations were actually beneficial because operations under the BiOp would improve survival over that under the plan adopted by the Northwest Power Planning Council under the Northwest Power Act. Despite concern that targeting improvements over the status quo, rather than attempting to ensure viable populations, would not halt decline of the species, the 1992 BiOp was not questioned in court. However, NOAA’s finding of no jeopardy did not remain unchallenged for long.

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79 See Salmon and the Endangered Species Act, supra note 21, at 550.
81 See Practicing Deception, supra note 12, at 736 (asserting that NOAA’s 1992 plan for hydroelectric operations “made no attempt to restore salmon populations to healthy, viable levels” and describing the agency’s stance on balancing hydropower and salmon as “hopefully the situation will get no worse”). For example, one judge provided an example of what he deemed to be the “incongruous result” caused by focusing on mortality decreases to determine “no jeopardy”: “[I]f 100 listed species are expected to survive downstream juvenile migration in 1993, and 99 survived in 1990,” a “no jeopardy” finding could result, “even though a 100 survival level may still be considered so low as to constitute a continued threat to the species’ existence.” Idaho Dep’t of Fish & Game v. Nat’l Marine Fisheries Serv. (IDFG v. NMFS), 850 F. Supp. 886, 891 (D. Or. 1994), vacated as moot, 56 F.3d 1071 (9th Cir. 1995).
82 See Sacrificing the Salmon, supra note 27, at 179.
1. The 1993 BiOp

In 1993, NOAA issued a second BiOp concerning Columbia Basin hydroelectric operations, in which it refined its analysis of jeopardy. Under the new analysis, the agency decided that hydropower operations must (1) improve salmon survival, as measured against a 1986–1990 baseline, and (2) in combination with other human activities on the Columbia River, be reasonably likely to reduce salmon mortality. Because it concluded that the proposed 1993 hydroelectric operations met both criteria, NOAA issued a “no jeopardy” finding, announcing a very modest goal of merely stopping the decline in salmon runs over the next fifteen years.

The states of Idaho and Oregon responded by filing suit, alleging that NOAA’s choice of the baseline period and its life-cycle modeling of salmon mortality were arbitrary and capricious. In Idaho Department of Fish & Game v. National Marine Fisheries Service, U.S. District Court Judge Malcolm Marsh concluded that NOAA’s 1986–1990 baseline skewed salmon counts, since salmon runs were at record lows during that period. As Judge Marsh recognized, a baseline that included years of greater salmon counts would impose a more stringent standard for improving salmon survival. According to Judge Marsh, NOAA impermissibly “focused on the system capabilities tending to the status quo rather than stabilization of the species.” In short, NOAA set the bar too low.

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84 Id. at 10–11, 15.
85 Id.
86 IDFG v. NMFS, 850 F.Supp. at 891.
87 Id. at 893 (“I find that NMFS’ selection of the ‘86–’90 baseline is arbitrary and capricious because the agency failed to consider relevant facts such as the drought condition and low run numbers of the species during the base period.”).
88 Id. (“It is clear that a longer base period with includes years of higher abundance levels would have encompassed higher escapement levels and would have resulted in a higher goal.”).
89 Id.
Turning his attention to NOAA’s life-cycle modeling, Judge Marsh again rejected an important aspect of the agency’s jeopardy analysis. He determined that NOAA had discounted low range assumptions about survival and failed to consider the appropriate range of risk assumptions. By disregarding low end, worst-case assumptions, NOAA had inflated its confidence in salmon survival rates from fifty percent to between sixty and seventy percent. Moreover, the judge concluded that NOAA had inflated confidence levels by failing to consider the effects of the “extinction vortex”—the enhanced risk associated with small populations. Judge Marsh noted that considering the “extinction vortex” was especially important because, for example, despite obtaining ESA protection, NOAA expected only 242 Snake River sockeye and 246 fall chinook to return to their spawning grounds in 1993.

Judge Marsh proceeded to observe that the process NOAA pursued for salmon protection was “seriously, ‘significantly,’ flawed because it is too heavily geared towards a status quo that has allowed all forms of river activity to proceed in a deficit situation—that is, relatively small steps, minor improvements and adjustments—when the situation literally cries out for a major overhaul.” Therefore, the judge granted the plaintiffs’ motion for summary judgment, ordering NOAA to reinitiate consultation consistent with his findings. However, no overhaul was

90 Id. at 898.
91 Id.
92 Id. at 888–99.
94 IDFG v. NMFS, 850 F.Supp. at 900. According to Judge Marsh, “[i]nstead 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.” Id. (emphasis in original).
95 Id. at 900–01.
forthcoming. Instead of focusing energy on salmon recovery, NOAA continued to prefer changing hydroelectric operations only minimally—at the expense of salmon runs.96

2. The 1995 BiOp

NOAA expanded its next attempt to comply with the ESA by issuing a hydropower BiOp to cover dam operations for five years from 1995 to 1999.97 Unlike the 1993 BiOp, the 1995 BiOp concluded that hydropower operations would indeed jeopardize listed salmon species.98 Nevertheless, environmental groups and the state of Oregon filed suit, claiming that the 1995 BiOp was inadequate because it failed to (1) adequately lay out the ways in which reasonable and prudent alternatives (RPAs) would avoid jeopardy; (2) consider state and tribal life-cycle modeling results, relying instead on overly optimistic modeling; and (3) explain why the agency dropped a twenty-four-year period from its analysis, leading to more positive results in its review.99

96 See Practicing Deception, supra note 12, at 738 (declaring that “[t]he overhaul Judge Marsh called for never occurred because NOAA persisted [to] disregard . . . precautionary salmon management in favor of traditional hydrosystem operations”).
97 NMFS, BIOLOGICAL OPINION ON REINITIATION OF CONSULTATION ON 1994–98 OPERATION OF THE FEDERAL COLUMBIA RIVER POWER SYSTEM AND JUVENILE TRANSPORTATION PROGRAM IN 1995 AND FUTURE YEARS 103–04 (1995). Just before Judge Marsh decided IDFG v. NMFS, NOAA finished a BiOp intended to cover hydropower operations from 1994 to 1998 that was substantially similar to its 1993 BiOp. See NMFS, ENDANGERED SPECIES ACT SECTION 7 CONSULTATION REGARDING 1994–98 OPERATION OF THE FEDERAL COLUMBIA RIVER POWER SYSTEM AND JUVENILE TRANSPORTATION PROGRAM IN 1994–98 7–8 (1994). To comply with Judge Marsh’s order, the agency reinitiated consultation. See Columbia River Basin, supra note 22, at 90–91; Salmon and the Endangered Species Act, supra note 21, at 553, 522–55 (alleging that the move from one- to five-year BiOps was one of the salmon’s contributions to the ESA that outweighed the ESA’s contributions to listed salmon).
98 Am. Rivers v. NMFS, 1997 WL 33797790, at *6. The plaintiffs in this case were environmental groups joined by the state of Oregon. Id. at *1. Additionally, the Yakama, Umatilla, Nez Perce, and Warm Springs Tribes, as well as the state of Alaska, filed amicus briefs in support of the plaintiffs and the state of Oregon. Id. at *2–3.
99 Id. at *4–5, *8, *9. In an earlier draft of the 1995 BiOp, NOAA considered recovery over both a twenty-four-year period and a forty-eight-year period, but the final 1995 BiOp included only an analysis of recovery over a forty-eight-year period, which produced the most optimistic results. Id. at *9.
In contrast to his decision about the 1993 BiOp and encouragement to overhaul plans for salmon protection, in *American Rivers v. National Marine Fisheries Service*, Judge Marsh upheld NOAA’s 1995 BiOp. After deciding that the agency’s explanation of RPAs was sufficient, and that it had made a reasoned evaluation when it chose to rely on certain life-cycle modeling and to drop the twenty-four-year period from its analysis, Judge Marsh deferred to NOAA’s judgment. Ultimately, he concluded that deference was warranted because the ESA “says nothing about risk tolerance, and the limits of judicial review dictate that I not interfere with a federal agenc[y’s] exercise of professional judgment or their reasoned evaluations.” But Judge Marsh explained that deference to NOAA did not amount to judicial confidence with the agency’s plans for salmon protection; instead, he indicated unease with the agency’s potential recklessness in accepting high levels of risk when managing salmon runs: “Given the dwindling numbers, time is clearly running out. As a long-time observer and examiner of this process, I cannot help but question the soundness of the selected level of risk acceptance.”

The Ninth Circuit affirmed Judge Marsh’s approval of the 1995 BiOp in a brief opinion in 1999. However, when Judge Redden assumed review of the case upon Judge Marsh’s change to senior judge status in 1998, NOAA’s judgment in permitting the risk of extinction of salmon species would face a new round of legal challenges.

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100 See Idaho Dep’t of Fish & Game v. Nat’l Marine Fisheries Serv. (IDFG v. NMFS), 850 F. Supp. 886, 900 (D. Or. 1994), vacated as moot, 56 F.3d 1071 (9th Cir. 1995).
101 *Am. Rivers v. NMFS*, 1997 WL 33797790, at *14. For example, Judge Marsh stated that “[a]lthough NMFS’ optimism may be criticized, I cannot say that the proposed action within RPA fail to provide a sufficiently reasoned justification for NMFS’ no jeopardy conclusion.” *Id.* at *9.
102 *Id.* at *10.
103 *Id.*
104 *Am. Rivers v. Nat’l Marine Fisheries Serv.*, No. 97-36159, slip op. at 6–7 (9th Cir. Mar. 8, 1999) (affirming *Am. Rivers v. NMFS*, 1997 WL 33797790) (“NMFS reasonably explained the close relationship between jeopardy and critical habitat and identified certain effects of the dam operations (e.g., reduction of water velocity and increase in water temperature) that both jeopardize the species themselves and adversely modify the species’ critical habitat. . . . Given NMFS’s expertise in this area, the nature of the proposed action (dam operations), and the species’ habitat at issue here, we cannot say that NMFS’s conclusion in the 1995 BiOp that the jeopardy analysis ‘encompasses’ the critical habitat analysis was arbitrary and capricious.”).
III. JUDGE REDDEN’S FIRST REMAND: THE 2000 BIOP

In 2000, NOAA issued a new BiOp on hydroelectric operations from 2001 to 2005. Under the 2000 BiOp, NOAA retained the dual standard approach it employed in its 1995 BiOp, seeking both survival and recovery of salmon species. However, NOAA’s definition of “survival” became more favorable to hydropower operations in the 2000 BiOp: that is, a salmon species would achieve “survival” if only one adult salmon returned to spawn over a salmon generation. Nevertheless, even using this weak standard and a likelihood of recovery that was only “moderate to high,” NOAA concluded that hydroelectric operations would jeopardize the eight listed salmon species spawning above Bonneville Dam.

As a result of its jeopardy finding, NOAA analyzed RPAs that included mitigation measures needed to meet the agency’s standards for survival and recovery. NOAA’s proposed mitigation included studies on salmon survival, a continued reliance on salmon transportation, and changes in spill. But these measures alone did not avoid jeopardy. Consequently, although most RPAs attempt to mitigate the effects of the action itself, the 2000 BiOp focused on

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108 See Columbia River Basin, supra note 22, at 94.
110 Id. at 8-3, 8-5, 8-7, 8-13, 8-15, 8-17, 8-23, 8-25 (identifying a “moderate to high likelihood” of recovery for all eight listed salmon species spawning above Bonneville Dam, including all Snake River species, Upper Columbia spring/summer chinook and steelhead, Middle Columbia steelhead, and Columbia River Chum).
111 Id.
112 Id.
113 See Sacrificing the Salmon, supra note 27, at 187 (stating that in its analysis of operational mitigation, “[b]asically the BiOp’s approach was to assume that the Lower Snake Dams would not be breached, then attempt to craft an aggressive restoration program around the continued existence of the dams”).
114 See Practicing Deception, supra note 12, at 753 (“Although RPAs generally attempt to mitigate the adverse effects an agency’s action may have on listed species by altering the proposed action itself, remarkably, the 2000
offsite mitigation, relying on changes related to harvest, habitat, and hatcheries instead of major alterations to dam operations. Although unstated, the clear goal in relying on offsite mitigation seemed to be to avoid having to recommend breaching dams on the Lower Snake River.

In relying on offsite mitigation, NOAA considered the proposed actions in light of an area much larger than the “action area” (the mainstem of the river, where the dams exist), placing the burden of recovering salmon beyond the operation of the dams. Further, implementation of offsite mitigation measures the 2000 BiOp—including financing and initiating improvements to habitat, funding hatchery program reform, and working with federal, state, and tribal fishery agencies to set and limit harvest rates—was largely left to agencies that had no role in operating hydropower facilities. For example, the 2000 BiOp directed BPA to “work with” other agencies like the Environmental Protection Agency and the U.S. Geological Survey to develop habitat and improvement plans. Based on an assumption that these sorts of mitigation measures would actually occur, NOAA concluded that federal hydropower operations in the Columbia River Basin between 2001 and 2005 would not jeopardize listed salmon species.

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BiOp called for very few [Federal Columbia River Power System] operational changes, and instead made only minor technical changes.”).

115 2000 BiOp, supra note 106, at 9-1, 9-2. See also Sacrificing the Salmon, supra note 27, at 187 (“This approach drew the BiOp’s focus away from the hydroelectric system, the cause of most man-induced salmon mortalities.”).
116 See Michael C. Blumm & Melissa Powers, Avoiding Dam Breaching through Offsite Mitigation: NMFS’s 2000 Biological Opinion on Columbia Basin Hydroelectric Operations, 32 ENVTL. L. 241, 261–64 (2002) [hereinafter Avoiding Dam Breaching] (describing the habitat, hatchery, and harvest elements of the RPA). Even though NOAA determined that breaching Lower Snake River dams provided the most certainty of long-term survival and recovery of salmon species, it rejected this option because as politically controversial. See id. at 241 (asserting that “[t]o avoid the politically controversial position of recommending dam breaching, the 2000 biological opinion called for numerous ‘offsite’ mitigation measures involving habitat restoration, hatchery operations, and harvest management”).
118 See Columbia River Basin, supra note 22, at 95.
A. Rejecting the 2000 BiOp

In response to NOAA’s issuance of the proposed 2000 BiOp, numerous environmental and conservation groups filed suit, claiming that the BiOp’s finding of no jeopardy was arbitrary and capricious. This time, the environmentalists alleged that the agency had arrived at a “no jeopardy” conclusion by relying on proposed federal mitigation measures that had not undergone section 7 consultations, as well as some state and private mitigation measures that were not “reasonably certain” to occur, as required by the ESA. The state of Oregon and the tribes of the Nez Perce, Yakama, Umatilla, and Warm Springs Reservations supported the plaintiffs, submitting amicus curiae briefs. In 2003, in National Wildlife Federation v. National Marine Fisheries I (NWF v. NMFS I), Judge Redden agreed with the environmentalists, forcing NOAA to reconsider its 2000 BiOp.

Judge Redden first concluded that NOAA’s defined “action area” was arbitrary and capricious because it excluded the range-wide area subject to the indirect effects of hydropower operations. He observed that NOAA’s definition of the action area was limited to the area immediately around the dam operations—that is, the Columbia and Snake Rivers. In support of his conclusion that NOAA’s definition of the action area violated the ESA, the judge also

121 Id. at 199–1200. The sixteen environmental and conservation groups that were plaintiffs in this case included National Wildlife Federation, Idaho Wildlife Federation, Washington Wildlife Federation, Sierra Club, Trout Unlimited, Pacific Coast Federation of Fishermen’s Associations, Institute for Fisheries Resources, Idaho Rivers United, Idaho Steelhead and Salmon United, Northwest Sportfishing Industry Association, Friends of the Earth, Salmon for All, and Columbia Riverkeeper. Id.
122 Id. at 1205 (“Plaintiffs, the Treaty Tribes, and the State of Oregon contend that the no-jeopardy conclusion in the 2000BiOp is arbitrary and capricious, and therefore invalid, because it relies on future federal mitigation actions that have not undergone section 7 consultation. Moreover, plaintiffs contend that the no-jeopardy conclusion also relies on the implementation of non-federal off-site mitigation actions that are no reasonably certain to occur.”).
123 Id. at 1200.
124 Id. at 1215–16.
125 Id. at 1212. As the judge noted, “‘[a]ction area’ means all areas to be affected directly or indirectly by the Federal action, and not merely the immediate area involved in the action.” Id. at 1205 (quoting 50 C.F.R. § 402.02).
126 Id.
noted that the 2000 BiOp relied heavily on offsite mitigation occurring beyond that limited range, with the result that much of the mitigation would actually occur outside the action area.\textsuperscript{127}

Second, Judge Redden rejected NOAA’s reliance on offsite mitigation measures.\textsuperscript{128} NOAA premised offsite mitigation success on actions that had a “reasonable chance of being implemented.”\textsuperscript{129} However, this promise fell short of the ESA requirement that such actions must be reasonably certain to occur.\textsuperscript{130} Because there was no evidence demonstrating that any of the states, tribes, or private entities responsible for overseeing offsite mitigation had committed to funding or implementing any of the mitigation measures the RPA assigned them, Judge Redden concluded that those measures were not in fact “reasonably certain” to occur.\textsuperscript{131} Moreover, he concluded that NOAA incorrectly relied on federal mitigation measures, such as habitat and harvest mitigation actions, that had not undergone section 7 consultations.\textsuperscript{132} Judge Redden therefore ruled that the 2000 BiOp’s finding of “no jeopardy” was arbitrary and capricious.\textsuperscript{133}

Rejecting both NOAA’s defined action area and the agency’s reliance on uncertain offsite mitigation measures, Judge Redden remanded the 2000 BiOp to NOAA.\textsuperscript{134} He subsequently held a conference with counsel of record at which all parties agreed that the court should grant NOAA

\textsuperscript{127} Id. (“If the proposed range-wide, off-site mitigation actions are not, in reality, part of the action area, they should not have been included within the ‘cumulative effects’ analysis of the 2000BiOp. However it is apparent that NOAA included them as part of the RPA in the 2000BiOp to justify its no-jeopardy conclusion.”).
\textsuperscript{128} Id. at 1215.
\textsuperscript{129} Id. at 1213.
\textsuperscript{130} Id. at 1214. \textit{See also} 50 C.F.R. § 402.02 (ESA regulations defining “indirect effects” as “those that are caused by the proposed action and are later in time, but still are reasonably certain to occur.”).
\textsuperscript{131} \textit{NWF v. NMFS I}, 254 F. Supp. 2d at 1213–15. Judge Redden quoted Oregon’s assertion that the 2000 BiOp “relies on actions for which necessary funding is unavailable, actions for which the agencies lack authority, and actions that are not reasonably certain to occur because of the lack of binding agreements.” \textit{Id.} at 1213. \textit{See also} Or. Natural Res. Council v. Nat’l Marine Fisheries Serv., 6 F. Supp. 2d 1139, 1152–56 (D. Or. 1998) (overturning NMFS’ decision not to list an ESU of coho salmon as threatened under the ESA, and explaining that NMFS improperly relied on voluntary mitigation measures, rather than regulatory mitigation measures).
\textsuperscript{132} \textit{NWF v. NMFS I}, 254 F. Supp. 2d at 1210, 1215.
\textsuperscript{133} Id. at 1214–15.
\textsuperscript{134} Id. at 1215.
one year to cure the deficiency. At the conference, NOAA requested that Judge Redden leave
the 2000 BiOp in place pending issuance of a new BiOp, but the environmental groups objected,
instead asking the court to vacate the 2000 BiOp. NOAA objected to this vacatur on three
grounds: (1) no additional harm would occur to salmon if the 2000 BiOp was left in place during
the one-year remand period; (2) the take of salmon would continue even if the judge vacated the
BiOp; and (3) curtailing Columbia Basin hydroelectric operations could significantly damage the
“economic and social fabric of the region” by exposing action agencies to ESA liability for the
take of salmon.

On July 1, 2003, Judge Redden denied the environmental groups’ motion to vacate the
BiOp. According to the judge, the environmental groups had failed to show that vacating the
2000 BiOp during the remand period would limit jeopardy to salmon. Judge Redden also
decided that the environmental groups had not effectively countered NOAA’s concerns that
vacatur would substantially disrupt hydropower operations by exposing action agencies to
liability under the ESA for takes of salmon during the remand period. Thus, he opted to permit
the 2000 BiOp to remain in place. However, Redden retained jurisdiction over the case during
the remand, setting a date for a conference to discuss the parameters and timing of periodic

136 Id. at 2.
137 Opinion 2, July 1, 2003, ECF No. 439-2 (Case No. 3:01-cv-00640-SI). In contrast, the state of Oregon
couraged Judge Redden to leave the 2000 BiOp in place but retain jurisdiction during the period of remand and
allow motions to assert additional protective measures as necessary to avoid further jeopardy. Id. at 3. Although the
judge decided to leave the BiOp in place, he declined to entertain motions to assert additional protective measures.
Id. at 4.
138 Id.
139 Id. at 3.
140 Id.
141 Id. at 3–4. For discussions of remand without vacation, see Kristina Daugirdas, Note, Evaluating Remand
Without Vacatur: A New Judicial Remedy for Defective Agency Rulemakings, 80 N.Y.U. L. REV. 278 (2005); Benja
jamin W. Tettlebaum, Note, “Vacation” at the Farm: Why Courts Should Not Extend “Remand without
Vacation” to Environmental Deregulation, 97 CORNELL L. REV. 405 (2012).
He also appointed a technical advisor to help him understand the intricacies of ESA requirements.  

B. Managing the 2000 BiOp on Remand

On July 21, 2003, Judge Redden established an Attorneys’ Steering Committee to facilitate communication and cooperation among the parties and the court. The steering committee meetings were open to the public, and the court ensured that transcripts of the meetings were available to the public. Judge Redden made no rulings at the steering committee meetings, but he participated in discussions and set up meetings with the committee at intervals during the remand period.

In January 2004, after NOAA released its second quarterly report, Judge Redden met with the steering committee again. After reviewing the report, the judge expressed concern about steps not yet taken because the agency had not yet (1) compiled data on 2001 salmon returns; (2) collaborated with government agencies, the states, or the tribes; or (3) developed

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142 Opinion 4, July 1, 2003, ECF No. 439-2 (Case No. 3:01-cv-00640-SI).
143 Opinion & Order 8, Mar. 2, 2005, ECF No. 793 (Case No. 3:01-cv-00640-SI). All parties agreed that Judge Redden should have access to a technical advisor, and NOAA agreed to pay for that service. Id. Nevertheless, in March 2005, senior district court judge Auncer Haggerty got involved because the intervening irrigators moved to have Judge Redden disqualified from the case, arguing in part that the judge’s meetings with the technical advisor constituted ex parte contacts. Id. However, observing that “[i]t is well known that cases brought under the ESA can involve complex technical and scientific matters,” Judge Haggerty declined the irrigators’ request for oral argument and denied their motion. Id.
144 Id. at 6 (“At an in-court status conference with the parties held July 21, 2003 . . . Judge Redden suggested that a steering committee might be created to monitor the progress of the remand and facilitate the cooperation in consultation required to complete the remand. The parties agreed a steering committee would be a good way to monitor progress and cooperation.”). See Opinion & Order 2, May 13, 2004, ECF No. 496 (Case No. 3:01-cv-00640-SI) (discussing the Attorneys’ Steering Committee).
145 Opinion & Order 6, Mar. 2, 2005, ECF No. 793 (Case No. 3:01-cv-00640-SI).
146 Id.
147 See id. at 8.
monitoring programs or performance standards necessary to implement reasonable and prudent alternatives, offsite mitigation plans, or habitat and hatchery measures.\textsuperscript{148}

After an April 2004 meeting with the parties, the action agencies, and interested members of the public, Judge Redden acknowledged that some extension of time to complete a revised BiOp was necessary.\textsuperscript{149} Consequently, in May 2004, he granted a motion for extension, permitting NOAA to have until the end of November 2004 to complete its BiOp.\textsuperscript{150} In his order granting that motion, Judge Redden set the next steering committee meeting for June 4, 2004 and directed the committee to consider hatchery policy and annual spill plans, make progress on securing funding for mitigation measures, and report on NOAA’s interpretation of jeopardy, among other things.\textsuperscript{151} In the May 2004 order, the judge also indicated to the parties that he might want discussion of spill at the next committee meeting.\textsuperscript{152}

C. Results of Managing Revision of the BiOp

Judge Redden accomplished several important feats by managing NOAA’s BiOps on remand. For example, by working closely with the parties to manage all of the failed BiOps on remand, the judge fostered a tone of collaboration.\textsuperscript{153} Judge Redden’s role in encouraging such collaboration was critical since, according to one knowledgeable participant, “without the establishment of judge-imposed ground rules, initial rounds of negotiations have minimal chance

\begin{footnotesize}
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\item[-] Id. Concerning collaboration with government agencies, the states, and the Tribes, Judge Redden warned that “[t]ime was running out.” Id.
\item[-] Id.
\item[-] Id. at *2; Opinion & Order 3–4, May 13, 2004, ECF No. 496 (Case No. 3:01-cv-00640-SI).
\item[-] Opinion & Order 4, May 13, 2004, ECF No. 496 (Case No. 3:01-cv-00640-SI).
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of success, primarily because most of the solutions involve changes to a well-entrenched status quo. Instead of bowing to the status quo, Judge Redden required accountability for the protection of listed salmon, regardless of pressures from powerful industry groups, by maintaining court involvement throughout the BiOp process.

The judge first ordered quarterly status reports on June 2, 2003, after striking down the 2000 BiOp, and he continued to require the reports, as well as hearings on the reports, through preparation of a 2008/2010 BiOp. While NOAA was revising the BiOp on remand, Judge Redden’s requirement that the agency provide quarterly reports, as well as his participation in conference meetings and issuance of documents guiding the agency, brought transparency to the process of assessing the effects of hydropower on listed salmon. Moreover, the judge ensured that he acquired an objective, third-party perspective on the complex scientific aspects of the case by retaining the “eminently qualified” Dr. Howard Horton as a technical advisor.

Even though agency decisionmaking theoretically is a product of considering the perspectives and interests of all affected participants, interest-group pressure may cause agencies to discount the weight of certain interests—like the restoration of Columbia Basin salmon runs—relative to others, such as the economic power of Columbia Basin hydroelectric operations.

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156 See supra notes 144–52, and infra notes 238–278, and accompanying text.
157 Opinion & Order 8–9, Mar. 2, 2005, ECF No. 793 (Case No. 3:01-cv-00640-SI). According to Judge Haggerty, “[i]t is well known that cases brought under the ESA can involve complex technical and scientific matters. Judge Redden has called upon Dr. Horton for the type of advice he has rendered to other judges, including Judges Graid, Marsh, and King. Dr. Horton has been providing technical and scientific service to courts for more than 20 years, and his training, experiences, and involvement in cases such as this evidence that he is eminently qualified to serve as [Judge Redden’s] technical advisor.” Id. at 8.
158 See, e.g., Carl Tobias, *Public Law Litigation and the Rules of Civil Procedure*, 74 CORNELL L. REV. 270, 282–83 (1989) (“During the 1960s, numerous observers with different political perspectives increasingly criticized the agencies. They claimed that agencies were “captured” by the very interests they were supposed to regulate, that agencies failed to achieve the goals for which they were established, and that agencies were ineffective or unresponsive. Many courts, writers, and critics came to perceive considerable agency decisionmaking as an essentially legislative process in which the perspectives of all affected individuals and interests were evaluated in
Thus, public participation in agency decisionmaking may be critical to a fair balance between contending interests, even though agency decisionmaking theoretically is a product of considering of the perspectives and interests of all affected participants. Although the ESA provides no right-to-public-comment in section 7 consultation procedures, the quarterly status reports Judge Redden ordered had the beneficial effect of forcing NOAA to respond to concerns raised by both the plaintiffs and the court, essentially permitting a limited kind of public involvement.

D. The 2004 Summer Spill Decision

In July 2004, while NOAA was revising the 2000 BiOp rejected by Judge Redden, BPA and the Army Corps of Engineers issued a “statement of decision” in which the agencies decided to curtail the summer spill at four Columbia River Dams. Since spilling water over the dams is the safest way for juvenile salmon to pass hydroelectric dams, the 2000 BiOp had assigned summer spill the “highest priority.” Nevertheless, in July of 2004, NOAA approved the proposal put forth by BPA and the Corps, opting to curtail summer spills at The Dalles and Bonneville dams during the summer of 2004.

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159 See Nat’l Ass’n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 682 n.6 (2007); Interagency Cooperation—Endangered Species Act of 1973, as Amended; Final Rule, 51 Fed. Reg. 19,928 (June 3, 1986) (“Nothing in section 7 authorizes or requires the Service to provide for public involvement (other than that of the applicant) in the ‘interagency’ consultation process.”).


161 See Columbia River Basin, supra note 22, at 97 (“Spill is the safest way for juvenile salmon migrating in the river to pass hydroelectric dams, but water spilled over the dams does not generate power.”).


163 NWF v. NMFS II, 2004 WL 1698050, at *1.
In defense of its decision to approve curtailment of summer spill, NOAA claimed that the measure would create an additional $18–28 million in revenue from increased hydropower production, and also that a series of offsets, including releasing 100,000 acre-feet of water from the Brownlee Reservoir in July 2004 to increase river flows to help juvenile salmon migrate down the river, would mitigate the adverse effects of the lack of spill. However, in *National Wildlife Federation v. National Marine Fisheries Service II (NWF v. NMFS II)*, environmental and conservation groups challenged NOAA’s decision to approve curtailed spill on the basis that the agency had once again relied on mitigation measures not certain to occur.

In July 2004, responding in part to technical advice from Dr. Horton, Judge Redden agreed with the plaintiffs and rejected the proposed curtailment of spill, concluding that there were “fundamental defects in [the agency’s] reasoning.” First, the judge observed that the 100,000 acre-feet of water from Brownlee Reservoir was not “new” water because the 2000 BiOp assumed that substantial water releases from Brownlee Reservoir would continue. Second, he determined that NOAA’s assumption that the water from Brownlee Reservoir would be released at a uniform rate over twenty-one days, keeping water temperatures within an acceptable range, was “unsupportable.” Judge Redden concluded that these “flawed assumptions,” as well as NOAA’s own documentation indicating that projected survival

165 *NWF v. NMFS II*, 2004 WL 1698050, at *4.
166 *Id.* at *1. The plaintiffs in this suit were the National Wildlife Federation, Idaho Wildlife Federation, Washington Wildlife Federation, Sierra Club, Trout Unlimited, Pacific Coast Federation of Fishermen’s Associations, Institute for Fisheries Resources, Idaho Rivers United, Idaho Steelhead and Salmon United, Northwest Sportfishing Industry Association, Friends of the Earth, Salmon for All, and Columbia Riverkeeper. *Id.*
167 *Id.* at *4–5.
168 *Id.* at *4 (citing the 2000 BiOp at 3-1).
169 *NWF v. NMFS II*, 2004 WL 1698050, at *4 (recognizing that the assumption of a uniform release rate “was made by the agency despite the fact that the agreement with Idaho Power Company did not require the water to be released at a uniform rate . . . and there was no rational basis to conclude that the water would be released in such a manner given the pattern of releases in prior years”). Judge Redden opined that “the assumption of uniform flow was made to accommodate the limits of the model used by NOAA . . . rather than to reflect real river conditions.” *Id.*
improvements had not materialized, undermined confidence in the agency’s reasoning. He therefore enjoined the Corps from implementing summer spill curtailments.

The *NWF v. NMFS II* decision was noteworthy for demonstrating Judge Redden’s willingness to subject the federal operating agencies’ reasoning to exacting judicial scrutiny. Moreover, the decision reflected the judge’s mounting frustration with NOAA’s approval of agency actions that jeopardized listed salmon species to maintain or increase power production.

IV. JUDGE REDDEN’S SECOND REMAND: THE 2004 BIOP

On September 9, 2004, NOAA completed a draft revised BiOp, and the action agencies filed a related implementation plan. Judge Redden responded by scheduling a status conference for September 28, 2004 to discuss those documents. He explained that his intent in reviewing the draft BiOp was “to ascertain whether it is likely that the government was headed for a train wreck, and, if so, whether it could be avoided.” On September 23, 2004, in preparation for the status conference, the judge issued an order with preliminary observations and questions directed to NOAA and the other federal action agencies.

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170 *Id.* at *5.
171 *Id.* at *6.
172 See *Practicing Deception*, supra note 12, at 767 (claiming that Judge Redden’s decision “revealed [his] growing impatience with attempts by federal hydrosystem managers to obfuscate the effects of [Federal Columbia River Power System] operations on listed salmon species. The judge’s observation that ESA implementation required more than a simple ‘numbers game’ reflected his increasing skepticism of the claims of federal dam operators and NOAA, who were willing to risk large numbers of listed salmon, while professing to fulfill their ESA duty to avoid jeopardy through other actions that allegedly compensated for the increased risk.”).
173 Order 2, Sept. 23, 2004, ECF No. 620 (Case No. 3:01-cv-00640-SI).
174 *Id.*
175 Opinion & Order 7, Mar. 2, 2005, ECF No. 793 (Case No. 3:01-cv-00640-SI).
176 *Id.* at 1–2.
Earlier, in May 2004, Judge Redden had observed that NOAA appeared to be advocating a new framework for making jeopardy determinations.\textsuperscript{177} Now, in his September 23 order, the judge stated that although NOAA described its draft 2004 revised BiOp as a new version of the 2000 BiOp, the agency’s draft “differ[ed] markedly from the 2000 BiOp in both its analytical approach and its conclusions.”\textsuperscript{178} In the same order, Judge Redden urged NOAA to consider several issues for discussion at the status conference, including whether the agency had used the remand period to create a new BiOp—and, if so, whether that was permissible; why the agency failed to include a reasonable and prudent alternative even after being directed to do so; and what scientific evidence supported the agency’s decision to establish a new concept of the environmental baseline that included the effects of the dams.\textsuperscript{179}

After the status conference in late September 2004, NOAA released a revised BiOp in November 2004 based on an “updated proposed action.”\textsuperscript{180} However, rather than being more protective of salmon than the 2000 BiOp, the new 2004 BiOp concluded that operation of the hydroelectric system in the Columbia River Basin would not jeopardize listed salmon species or adversely modify critical habitat.\textsuperscript{181} NOAA’s new no-jeopardy decision was based in large part

\textsuperscript{177} Opinion & Order 2, May 13, 2004, ECF No. 496 (Case No. 3:01-cv-00640-SI). According to Judge Redden, on May 13, 2004, “[i]t appear[ed] that [NOAA] has now proposed a new analytical framework to determine whether [hydropower operations] pose[,] jeopardy to listed salmon.” \textit{Id.} The judge suggested topics of discussion related to the change in jeopardy framework. \textit{Id.} Further, he stated that “[t]he court is aware that [NOAA’s] policies regarding the listing of Northwest salmonids are in flux, including how fish raised in hatcheries are to be considered when determining whether to list a species or Evolutionary Significant Unit. At the next steering committee meeting, the court would like the parties to address the possible ramifications, if any, of such policy changes to this case, including any impact on the listing status of Columbia River salmon and steelhead runs. Similarly, the court would like the parties to address the status, substance, and ramifications for this case of rule changes required by the \textit{Alsea} decision.” \textit{Id.}

\textsuperscript{178} Order 2, Sept. 23, 2004, ECF No. 620 (Case No. 3:01-cv-00640-SI).

\textsuperscript{179} \textit{Id.} at 2–3. Judge Redden also stated that “[p]laintiffs, intervenors, states, Treaty Tribes, and other \textit{amici curiae} may identify and describe their most serious five concerns and e-mail them to the court, defendants, and other parties” by the morning of September 27, 2004—the day before the status conference. \textit{Id.} at 4.

\textsuperscript{180} NMFS, BIOLOGICAL OPINION, CONSULTATION ON REMAND FOR OPERATION OF THE COLUMBIA RIVER POWER SYSTEM AND 19 BUREAU OF RECLAMATION PROJECTS IN THE COLUMBIA BASIN 1-3 (Nov. 30, 2004) [hereinafter 2004 BiOp].

\textsuperscript{181} \textit{Id.} at 8-4.
on characterization of the environmental baseline against which it compared proposed actions to determine whether species would be adversely impacted.\(^\text{182}\)

In the 2004 BiOp, designed to cover Columbia Basin hydroelectric operations for ten years, NOAA adopted a novel way to assess jeopardy to a listed species.\(^\text{183}\) The new method of assessing jeopardy defined the environmental baseline to include the effects of all existing dam operations, on the apparent assumption that such operations were beyond the agencies’ control.\(^\text{184}\) According to the agency, “each of the dams already exist[ed], and their existence [was] beyond the scope of the . . . discretion” of the federal agencies.\(^\text{185}\) NOAA then distinguished between what it termed discretionary and nondiscretionary elements of an action and decided that action agencies were not required to consult on nondiscretionary elements, such as aspects of pre-existing projects that were beyond their control.\(^\text{186}\) Characterizing the existence of the dams as beyond the control of federal agencies, NOAA concluded that the effects of nondiscretionary dam operations formed part of the environmental baseline.\(^\text{187}\) In addition to excluding existing operations from the jeopardy determination, NOAA conflated recovery and survival and used a long-term balancing test to predict that the species’ critical habitat would not be adversely affected.\(^\text{188}\) As with earlier BiOps, environmentalists objected to the preference shown for hydroelectric operations at the expense of the recovery of listed salmon.


\(^{183}\) 2004 BiOp, supra note 170, at 1-9.

\(^{184}\) Id.

\(^{185}\) Id. at 5-5.

\(^{186}\) NWF v. NMFS III, 2005 WL 1278878, at *7–8.

\(^{187}\) Id. at *7.

\(^{188}\) Id. at *16–17.
A. Rejecting the 2004 BiOp


Judge Redden gave four reasons for finding the 2004 BiOp inadequate. First, NOAA had improperly segregated aspects of dam operations that it claimed were nondiscretionary. Second, the agency impermissibly limited its analysis to only the incremental effects of proposed dam operations instead of considering the aggregate effects the operations and the dams themselves. Third, NOAA’s critical habitat determination was flawed because the agency (1) failed to analyze the short-term negative effects of the proposed action in the context of life cycles and migration patterns; (2) relied on long-term improvements to critical habitat that were not certain in order to offset the short-term degradation of critical habitat; and (3) determined that the listed species’ critical habitat was sufficient for purposes of recovery, even though the

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189 *Id.* at *1.
190 *Id.* at *1–2; Opinion & Order 18, Dec. 29, 2005, ECF No. 1221 (Case No. 3:01-cv-00640-SI). After reviewing the 2004 BiOp, Judge Redden opined in December 2005: “We need a viable biological opinion. The public demands and deserves no less.” *Id.*
agency did not have information on in-river survival rates sufficient to make that determination. Finally, NOAA failed to separate survival from recovery in its analysis.\textsuperscript{193}

Judge Redden’s reasoning on the first issue was that NOAA could not eliminate consultation “where there is some meaningful discretionary involvement or control in the action.”\textsuperscript{194} He observed that the federal action agencies had “considerable discretion” in administering hydroelectric operations, including in decisions to operate the dams to encourage the divergent interests of hydroelectric power production, fish and wildlife protection, and recreation.\textsuperscript{195} The judge remarked that the ESA contains a single exemption for agencies where a statutory directive to undertake a project leaves them with insufficient discretion to avoid jeopardizing a listed species,\textsuperscript{196} but that in its 2004 BiOp, NOAA was attempting to create a nonstatutory exemption.\textsuperscript{197}

Under NOAA’s interpretation of what qualifies as a nondiscretionary element of an action, the agency did not need to consider the existence of Columbia Basin dams because some elements of the operation of those dams was nondiscretionary.\textsuperscript{198} However, Judge Redden determined that operation of the dams included both discretionary and nondiscretionary elements, concluding that the agency could not be “insulate[d] . . . from accountability because

\textsuperscript{193} Id. Judge Redden declined to address other potential issues with the 2004 BiOp, explaining that “[e]ach of the [four] issues is independently dispositive and, therefore, I need not address other issues raised by the parties.” Id.

\textsuperscript{194} Id. at *8.

\textsuperscript{195} Id. at *10 (“The action agencies have considerable discretion in their administration of the [hydroelectric] systems, allowing them to meet their mandates and yet adjust operations to fulfill multiple purposes, even though there may be some conflict among the purposes. Decisions in operations the [dams] to accommodate the divergent interests involve choices and the exercise of discretion.”).


\textsuperscript{197} NWF v. NMFS III, 2005 WL 1278878, at *10–11 (“For the [existing ESA exemption] to apply, the [Endangered Species] Committee must find, among other things, that there are no reasonable and prudent alternatives to the proposed action; the proposed action is of regional or national significance; and the ‘benefits of alternative courses of action’ that are ‘consistent with preserving the species or its critical habitat’ are clearly outweighed by the benefits of the proposed action.”).

\textsuperscript{198} Id. at *11.
of the nondiscretionary aspects of its proposed actions.” 199 He therefore decided that NOAA’s distinction between discretionary and nondiscretionary elements was contrary to law. 200 In so doing, he observed that the 2004 BiOp’s position on nondiscretionary elements departed from both its 1995 and 2000 BiOps, and that where an agency’s interpretation of a regulation conflicts with its own previous interpretations of a regulation, the new agency position is entitled to only limited judicial deference. 201

Concerning the second issue, Judge Redden determined that NOAA had impermissibly failed to consider the aggregate adverse effects on salmon from all relevant sources. 202 The judge explained that by employing a so-called “comparative approach,” the 2004 BiOp removed the effects of some elements—the elements the agency deemed nondiscretionary—from any consideration, consigning those effects to the environmental baseline. 203 The result, according to Judge Redden, was that NOAA analyzed only the incremental effects of its proposal standing alone, rather than in conjunction with the cumulative effects of a deteriorated environment, balancing the limited impact against beneficial mitigation measures. 204 Thus, by basing the jeopardy decision only on the effects of what it decided were discretionary elements of the proposed dam operations, NOAA “substantially lower[ed] the threshold required for the mitigation elements of the proposed action.” 205 Judge Redden determined that NOAA’s comparative approach was unlawful because it fell short of the comprehensive approach to

199 Id. According to Judge Redden, “the action agencies ha[d] not contended that ‘the sole cause’ of salmon and steelhead decline is ‘the existence of the dams and not any discretionary method of operating’ them.” Id.

200 Id.

201 Id. (”I give only limited deference to NOAA’s interpretation. When an agency’s new interpretation of a regulation conflicts with its earlier interpretations, the agency is ‘entitled to considerably less deference’ than a consistently[] held agency view.”) (citing Immigration & Naturalization Serv. v. Cardoza-Fonseca, 480 U.S. 421, 446 n.30 (1987).


203 Id. at *13.

204 Id.

205 Id. at *14.
jeopardy analysis required by the ESA.\textsuperscript{206} For a second time, the judge noted that NOAA was entitled to only limited deference because the agency had departed from its previous interpretation of a regulation.\textsuperscript{207}

On the third issue, Judge Redden rejected NOAA’s claim that the proposed hydroelectric operations would not adversely modify or destroy designated critical habitat.\textsuperscript{208} The judge observed that NOAA must separately consider whether a proposed action will adversely affect both the survival and recovery a listed species.\textsuperscript{209} However, although NOAA acknowledged that critical habitat for listed salmon was “poor” and likely to be degraded in the short term, and also that lowering spill rates would impair safe passage downstream for juveniles in the short term, the agency decided that the proposed action would not adversely modify critical habitat.\textsuperscript{210} NOAA arrived at this apparently contradictory conclusion by anticipating that short-term habitat degradation would be offset by habitat improvements that its BiOp promised by 2014.\textsuperscript{211} Judge Redden declined to follow NOAA’s reasoning about considering the balance of habitat degradation.

\textsuperscript{206} Id.; 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g). See supra note 201 and accompanying text (describing the first time Judge Redden gave limited administrative deference due to a change in position).

\textsuperscript{207} NWF v. NMFS III, 2005 WL 1278878, at *14 (“The approach of the 2004BiOp stands in sharp contrast to the aggregative approach NOAA used in prior BiOps, which was comprehensive enough to ensure an adequate jeopardy analysis without being so rigid as to foreclose consideration of non-quantifiable factors.”).

\textsuperscript{208} Id. at *16.

\textsuperscript{209} Id. at *15. See also Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059 (9th Cir. 2004) (“The agency’s controlling regulation on critical habitat thus offends the ESA because the ESA was enacted not merely to forestall the extinction of species (i.e., promote a species survival), but to allow a species to recover to the point where it may be delisted. The ESA also defines critical habitat as including ‘the specific areas . . . occupied by the species . . . which are . . . essential to the \textit{conservation} of the species’ and the ‘specific areas outside the geographical area occupied by the species . . . that . . . are essential for the \textit{conservation} of the species . . ..’ By these definitions, it is clear that Congress intended that conservation and survival be two different (though complementary) goals of the ESA. Clearly, then, the purpose of establishing ‘critical habitat’ is for the government to carve out territory that is not only necessary for the species' survival but also essential for the species’ recovery.”) (internal quotations omitted).

Judge Redden reported that NOAA’s Consultation Handbook defined “recovery” as “the process by which species’ ecosystems are restored and/or threats to the species are removed so self-sustaining and self-regulating populations of listed species can be supported as persistent members of native biotic communities,” and “survival” as “the species’ persistence . . . with sufficient resilience to allow recovery from endangerment. Said another way, survival is the condition in which a species continued to exist into the future while retaining the potential for recovery.” NWF v. NMFS III, 2005 WL 1278878, at *17.

\textsuperscript{210} Id. at *14–15.

\textsuperscript{211} Id. at *16.
degradation and offsets over a period of years, rather than in the short term.\textsuperscript{212} He concluded that such “optimistic” balancing was “unrealistic,” and therefore contrary to the ESA.\textsuperscript{213}

On the fourth and final issue, Judge Redden concluded that the 2004 BiOp was unlawful because, unlike the 1995 and 2000 BiOps, the 2004 BiOp did not include consideration of whether the proposed hydroelectric operations would appreciably reduce the likelihood of listed species’ recovery.\textsuperscript{214} In contrast with the earlier BiOps, the 2004 BiOp focused almost exclusively on the extent to which the proposed dam operations would reduce the reproduction, numbers, or distribution of the listed salmon.\textsuperscript{215} For a third time, Judge Redden gave only limited deference to an interpretation in the 2004 BiOp that differed significantly from interpretations in previous BiOps, deciding that NOAA’s jeopardy analysis was impermissible because it failed to address prospects for recovery of listed salmon species.\textsuperscript{216} Thus, the judge remanded NOAA’s 2004 BiOp.\textsuperscript{217}

NOAA appealed Judge Redden’s holding that the 2004 BiOp was arbitrary and capricious, but the Ninth Circuit affirmed the district court judge’s opinion in all respects.\textsuperscript{218}

\textbf{B. BPA’s Attempt to Defund the Fish Passage Center}

The Northwest Power Act called for the protection and restoration of Columbia Basin fish and wildlife—and salmon in particular—while assuring a reliable and affordable power supply in plans promulgated by the Northwest Power and Conservation Planning Council

\begin{footnotes}
\item[212] \textit{Id.}
\item[213] \textit{Id.}
\item[214] \textit{Id.} at *17.
\item[215] \textit{Id.}
\item[216] \textit{Id.}
\item[217] \textit{Id.} at *3, *7.
\item[218] \textsc{Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.}, 524 F.3d 917, 938 (9th Cir. 2008) (“In short, after a careful review of the record, we affirm the judgment of the district court. Its rejection of the 2004 BiOp was entirely appropriate, and it did not abuse its discretion in entering the remand order.”). \textit{See Imposing Judicial Restraints, supra} note 47, at 48, for further discussion of the Ninth Circuit’s decision.
\end{footnotes}
an interstate compact agency. The Council’s Columbia Basin Fish and Wildlife Program established the Fish Passage Center (FPC) to collect and analyze scientific information on Columbia Basin salmon migration and survival.

Despite its scientific focus, the FPC’s studies proved controversial when Judge Redden relied upon them in 2005 as an influence on one of his spill decisions. After Redden’s initial decision in June 2005 to require federal hydroelectric operators to spill water over the Lower Snake River and McNary Dams during the late spring and summer of 2005, the FPC issued a preliminary study reporting that the court-ordered spill had resulted in the highest levels of salmon survival recorded in recent years. Judge Redden relied on the FPC’s 2005 study when he again required spill during the spring and summer of 2006.

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219 See 16 U.S.C. § 839b(h)(1)(A) (stating that the purposes of the Northwest Power Act were “to encourage, through the unique opportunity provided by the Federal Columbia River Power System . . . conservation and efficiency in the use of electric power, and . . . the development of renewable resources within the Pacific Northwest [and] to assure the Pacific Northwest of an adequate, efficient, economical, and reliable power supply,” as well as “to protect, mitigate and enhance the fish and wildlife, including related spawning grounds and habitat, of the Columbia River and its tributaries, particularly anadromous fish which are of significant importance to the social and economic well-being of the Pacific Northwest”). See also Sacrificing the Salmon, supra note 27, at 129–60 (discussing passage of the Northwest Power Act).

220 See Seattle Master Builders Ass’n v. Pac. Nw. Elec. Power & Conservation Planning Council, 786 F.2d 1359 (9th Cir. 1986) (concluding that although Congress gave the interstate compact Council some attributes of federal law, Council members’ appointments, salaries, and administrative options were pursuant to laws of four individual states, and the states ultimately empowered Council members to carry out their duties; thus, appointments clause of Constitution, U.S.C.A. Const. Art. 2, § 2, cl. 2, did not require that members be appointed by the President instead of state governors).


222 For a discussion of the controversial nature of the FPC’s support for spill, see Practicing Deception, supra note 12.


224 See Practicing Deception, supra note 12, at 59.

In late 2005, Congress responded to the FPC’s support for spill by inserting language into a conference report that aimed to eliminate funding for the FPC.\footnote{See S. Rep. No. 109-84, at 178–79 (2006) (‘‘The Committee is concerned about the increasing cost of salmon recovery efforts in the Columbia River Basin, and about the potential adverse impact of those increased costs on customers of the Bonneville Power Administration. The Committee also is concerned about the quality and efficiency of some of the fish data collection efforts and analyses being performed. As a result, during fiscal year 2006, the [BPA] may make no new obligations from the [BPA] in support of the [FPC]. The Committee understands that there are universities in the Pacific Northwest that already collect fish data for the region and are well[ ] positioned to take on the responsibilities now being performed by the [FPC].’’).} The report suggested that the FPC should be defunded and have its functions transferred to other agencies,\footnote{See H.R. Rep. No. 109-275, at 174 (2005), reprinted in 2005 U.S.C.C.A.N. 1065, 1125 (‘‘The conferees call upon [BPA] and the [Council] to ensure that an orderly transfer of the [FPC] functions . . . occurs within 120 days of enactment of this legislation. These functions shall be transferred to other existing and capable entities in the region in a manner that ensures seamless continuity of activities.’’).} but the bill’s language made no reference the FPC at all.\footnote{Energy and Water Development Appropriations Act, 2006, Pub. L. No. 109-103, 119 Stat. 2247, 2276 (2005).} Nevertheless, a few weeks after the bill passed, BPA relied on the report language to justify soliciting replacement agencies for the FPC,\footnote{See BPA, Integrated Fish and Wildlife Program, Program Solicitation—Request for Applications 1 (2005), available at http://www.efw.bpa.gov/IntegratedFWP/RequestForApplications.pdf (asserting that ‘‘Congress passed legislation (House Report 109-275), which forbids BPA from making additional obligations in support of the [FPC]’’).} selecting Battelle Pacific Northwest Laboratory and Pacific States Marine Fisheries Commission to replace the FPC in 2006.\footnote{Press Release, BPA, BPA Selects Successors to Fish Passage Center (Jan. 26, 2006), http://www.bpa.gov/corporate/BPAnews/2005/NewsRelease.cfm?ReleaseNo=695 (last visited Jan. 27, 2008). Under the agency’s proposed plan, Battelle would ‘‘oversee, coordinate, and facilitate broader, nonroutine scientific analysis of that data, including independent peer review’’ and Pacific States would ‘‘manage the smolt monitoring program,’’ ‘‘perform functions associated with related data collection and management,’’ and ‘‘conduct routine analysis and reporting of that data.’’ Id.}

A group of environmentalists and conservationists, led by the Northwest Environmental Defense Center, challenged BPA’s decision to transfer the functions of the FPC.\footnote{Nw. Envtl. Def. Ctr. v. Bonneville Power Admin., 477 F.3d 668 (9th Cir. 2007).} The plaintiffs argued that the transfer was a violation of the agency’s duty to act consistent with the Council’s Fish and Wildlife Program, which called for continued operation of the FPC, and also that BPA’s withdrawal of funding for the FPC violated the Northwest Power Act, which requires BPA to use
its funding to “protect, mitigate and enhance fish and wildlife . . . in a manner consistent with” the Fish and Wildlife Program.232

In January 2007, the Ninth Circuit decided that BPA had violated both the Administrative Procedure Act (APA) and Article I of the Constitution by defunding the FPC.233 According to the Ninth Circuit, BPA violated Article I of the Constitution by transferring the functions of the FPC on the basis of mere legislative history.234 Further, the court concluded that the agency had no rational basis for its choice, and thus that it had acted arbitrarily and capriciously, in violation of the APA.235 Therefore, the Ninth Circuit granted injunctive relief, requiring BPA to continue to fund the FPC “until it ha[d] established a proper basis for displacing the FPC.”236 Thus, this decision maintained an important source of independent scientific information upon which Judge Redden could rely.237

232 Id. at 677–78; 16 U.S.C. § 839(b)(h)(10)(A). Under the Northwest Power Act, the Council must adopt a program to protect, mitigate, and enhance fish and wildlife, which is known as the Fish and Wildlife Program. Id. § 839(b)(h)(1)(A). The statute requires BPA to use its funding to protect, mitigate, and enhance fish and wildlife “in a manner consistent with . . . the program adopted by the Council.” Id. § 839(b)(h)(10)(A).

233 NEDC v. BPA, 477 F.3d at 691. See Imposing Judicial Restraints, supra note 16, at 57–65 (discussing this decision).

234 Id. at 682. “[C]ourts have no authority to enforce [a] principle [e] gleaned solely from legislative history that has no statutory reference point.” Id. at 683 (second and third alterations in original) (quoting Shannon v. United States, 512 U.S. 573, 584 (1994)).

235 Id. at 688. The Ninth Circuit explained that “the administrative record does not show that BPA . . . considered the relevant facts and used a rational process to decide to transfer the functions of the FPC to other entities. Apart from the evidence in the record reflecting BPA’s incorrect belief that it was required to follow the congressional committee report language, there is no evidence showing how BPA decided to transfer the functions of the FPC and to issue the December 8, 2005 Program Solicitation. This failure presents itself in high relief in light of the Council’s program calling for the continued operation of the FPC.” Id.

236 Id. at 691.

237 Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., No. CV 01-640-RE, 2005 WL 3576843, at *8 (D. Or. Dec. 29, 2005) (stating that an FPC study “showed that more spill improved the survival rate of salmon passing the dams compared to previous years”). Despite BPA’s attempts to defund it, the FPC still exists. See Council’s 2003 Fish and Wildlife Program, supra note 221, at 27. The 2003 Mainstem Amendments to the Fish and Wildlife Program, which are currently in force, expressly call for “the continued operation of the Fish Passage Center.” Id.
C. Managing the 2004 BiOp on Remand

After rejecting the 2004 BiOp, which was the fifth opinion NOAA issued on federal hydroelectric operations in the Columbia Basin, Judge Redden continued to oversee NOAA’s efforts to create a BiOp consistent with the ESA.238 In December 2005, worried about spill levels at several dams, environmental groups filed a motion for injunctive relief to require the U.S. Army Corps of Engineers to increase spill during salmon migration periods, decrease reliance on transportation, and augment flow.239

Judge Redden reviewed the Corps’ proposed 2006 spill program, noting that the Corps had adopted a “spread-the-risk” policy, using spill and truck and barge transport in relatively equal measures, because, according to the Corps, “[s]tudies do not establish, with absolute certainty, the relative benefits of spill versus transportation.”240 Giving deference to the agency’s scientific judgment, the judge approved its proposals for early spring spill and summer spill.241 However, Judge Redden granted the environmental groups’ request for injunctive relief in part, ordering important changes to two aspects of the Corps’ proposed 2006 spill program.242

The first change the judge ordered was to continue spill in the late spring in the same manner as in the early spring.243 In what Judge Redden described as a “radical departure from past operations” not justified by the best science available to the Corps, the agency proposed to

238 NWF v. NMFS III, 2005 WL 1278878, at *1–3 (observing that he required quarterly reports on NOAA’s progress after remanding the 2004 BiOp).
239 Opinion & Order 2, 4, Dec. 29, 2005, ECF No. 1221 (Case No. 3:01-cv-00640-SI). Plaintiffs sought “injunctive relief requiring the Corps to increase spill to assist juvenile spring/summer chinook salmon and steelhead migrating to the ocean during the spring. [Plaintiffs] also s[ought] an order requiring the Corps to increase the amount of water in the river for a proposed [] augmentation of flow, thereby creating a more natural river hydrograph for migrating juveniles and decreasing their travel time to the ocean.” Id. at 2–3. Judge Redden summarized the parties’ positions: “As to spill, the parties’ dispute essentially involves the extent to which the Corps intends to rely on transportation, rather than spill, during the spring and summer seasons. To a lesser extent the parties disagree on the amount of spill needed. The parties’ dispute as to the augmented flow issue is more fundamental.” Id. at 5.
240 Id. at 6.
241 Id. at 7, 10.
242 Id. at 11.
243 Id.
eliminate all late spring spill at three of its dams and instead rely exclusively on collection and transportation of juveniles during that time. The second change the judge ordered was to continue spill through August 31 rather than ceasing spill by August 15 if ninety-five percent of the salmon run had passed the dam, and he also directed the Corps to examine its reliance on transportation by truck during the remand period.

Judge Redden ordered all the Columbia Basin hydropower action agencies to provide him with a written report describing implementation and progress of the spill program, beginning with the first day of spring and summer spills and continuing every thirty days thereafter. Discussing the spill program the Corps proposed for 2006, Judge Redden observed that the FPC’s count of fish surviving the 2005 summer migration appeared to demonstrate that increased spill improved the survival of salmon passing dams. According to the judge:

The Fish Passage Center’s expertise at gathering such useful data must be replicated for the spring of 2006 and beyond. Only with such data can the relative benefits of spill and/or transportation be determined. The situation demands more certainty.

However, the judge declined to order the agencies to augment flow, deciding that the option was not supported by the best available science.

Shortly after the spill decision, on April 10, 2007, the court received an anonymous phone message asserting that at the end of March and beginning of April BPA had intentionally

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244 Id. at 7–9.
245 Id. at 11.
246 Id.
247 Id. at 16.
248 Id. at 16–17.
249 Id. at 16. According to Judge Redden, the plaintiffs has “failed to establish that the best available science support[ed] [their] proposal for augmented flow during the summer 2006 migration period.” Id.

The environmental groups subsequently opted not to pursue injunctive relief governing the Corps’ 2007 spill program because the federal action agencies entered into an agreement with several treaty tribes for spring and summer 2007, agreeing to continue the spill operations Judge Redden had ordered in 2006. Opinion & Order 3, May 23, 2007, ECF No. 1347 (Case No. 3:01-cv-00640-SI). However, that agreement proved insufficient to govern the agencies’ spill program.
violated spill requirements to satisfy commitments to supply power and then attempted to declare a system emergency to conceal the variance.\footnote{250} After overestimating and thus overselling power for April 3, 2007, with the result that it could not provide the promised power and meet its spill obligations, BPA violated fish protection measures in an attempt to generate more power in order to meet its commitments.\footnote{251} Concerned about this willful violation of his decision, Judge Redden issued a May 23, 2007 order in which he stated: “Apparently, BPA’s sales commitments to customers always trump its obligations to protect ESA-listed species. BPA must realize, however, that the fish-protection measures detailed in the 2000 and 2004 BiOps are not optional. Nor is compliance with the ESA.”\footnote{252} The judge therefore incorporated the terms of a 2007 agreement into a court order outlining the parameters of the 2007 spill program.\footnote{253} The agencies did not object,\footnote{254} and their spring and summer spill programs during the next four years complied with the judge’s 2007 order,\footnote{255} which is a reflection of the success of Judge Redden’s oversight.

After his 2007 order, Judge Redden continued to work with NOAA in the hope that the agency would arrive at a revised BiOp that would satisfy the ESA. For example, on February 18, 2009, the judge issued a letter to the parties to guide an oral argument scheduled for March 6,
The letter explained that Judge Redden’s goal in writing was to structure oral argument to leave enough time for a discussion of how to go forward if the 2008 BiOp failed review. Having twice remanded NOAA’s BiOp for hydropower operations, the judge declared: “I have no desire to remand this [BiOp] for yet another round of consultation. The revolving door of consultation and litigation does little to help endangered salmon and steelhead. Federal Defendants and the sovereigns have worked very hard on this [BiOp], and it shows—we have come a long way from the 2004 BiOp.” But Judge Redden identified several unresolved issues, including: (1) the adequacy of NOAA’s “trending toward recovery” standard for determining jeopardy under the ESA, (2) funding for estuary habitat improvements, and (3) contingency plans in the event that proposed habitat mitigation measures were not effective.

First, Redden questioned NOAA’s “trending toward recovery” jeopardy standard, instructing the parties to discuss the issue at oral argument and providing several detailed questions. The judge asked the agency, among other things, whether it was entitled to deference when it had “made no attempt to determine what actual recovery means.” Judge Redden also asked whether NOAA’s determination that any positive growth in a species’ population indicated that the species was “trending toward recovery” meant that only incremental survival is sufficient to avoid jeopardy. Second, the judge expressed concern that NOAA relied on estuary habitat improvements to arrive at a no-jeopardy finding but had failed to indicate how it would secure funding for those improvements. The agency estimated that the estuary habitat improvements would cost $500 million over twenty-five years, but Judge

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256 Letter to Parties, Feb. 18, 2009, ECF No. 1682 (Case No. 3:01-cv-00640-SI).
257 Opinion & Order 2, May 23, 2007, ECF No. 1347 (Case No. 3:01-cv-00640-SI).
258 Id. at 3–6.
259 Id. at 3.
260 Id.
261 Id. at 3–4.
262 Id. at 4.
Redden observed that the action agencies, including BPA, actually committed to spending only $5.5 million for ten years—and much of that funding was dependent on congressional approval.\(^{263}\) Third, Redden instructed NOAA to consider adding a contingency plan to the 2008 BiOp in case the mitigation measures failed.\(^{264}\) On February 25, 2009, the judge issued a second letter adding additional questions about the proposed estuary habitat improvements and funding for mitigation projects.\(^{265}\)

After oral argument in March 2009, Judge Redden continued to meet with the parties to encourage production of a lawful BiOp. On May 18, 2009, after an April 2, 2009 meeting, he sent a letter to the parties that provided his tentative position on the 2008 BiOp,\(^{266}\) stating that he had “serious reservations” about whether NOAA’s “trending toward recovery” standard complied with the ESA.\(^{267}\) He proceeded to admonish NOAA, declaring that the agencies “ha[d] spent the better part of the last decade treading water, and avoiding their obligations under the [ESA]. Only recently[] have they begun to commit the kind of financial and political capital necessary to save these threatened and endangered species, some of which are on the brink of extinction. We simply cannot afford to waste another decade.”\(^{268}\) Despite his concerns, Judge Redden concluded his letter with optimism about what the 2008 BiOp could accomplish.\(^{269}\)

\(^{263}\) Id.
\(^{264}\) Id. at 5–6.
\(^{265}\) Letter to Parties 1–2, Feb. 25, 2009, ECF No. 1683 (Case No. 3:01-cv-00640-SI).
\(^{266}\) Letter to Parties, May 18, 2009, ECF No. 1699 (Case No. 3:01-cv-00640-SI).
\(^{267}\) Id. at 2.
\(^{268}\) Id. at 3.
\(^{269}\) Id. at 3–4 (“All of us know that aggressive action is necessary to save this vital resource, and now is the time to make that happen. I am encouraged by recent news that Federal Defendants have already committed additional funds to both tributary and estuary habitat improvement. Additionally, the U.S. Bureau of Reclamation expects to deliver the oft-promised (but seldom delivered) 487,000 acre-feet of flow augmentation from the upper Snake River in 2009. These are positive developments, and demonstrate that the parties are finally starting to work together. If the parties can come to an agreement, I am optimistic that we can make this BiOp work and achieve what the previous BiOps have not.”).
NOAA’s 2008 BiOp aimed to govern hydropower operations through 2018, based on the agency’s assertion that the operation of federal dams would not jeopardize listed species during that period.\footnote{Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv. (NWF v. NMFS IV), No. CV 01–00640–RE, 2011 WL 3322793, at *3–4 (D. Or. Aug. 2, 2011) (discussing NOAA’s 2008 BiOp).} The 2008 BiOp’s framework for making a jeopardy determination relied on a standard seeking listed species’ “trend toward eventual recovery.”\footnote{Id. at *4.} To arrive at its finding of no jeopardy, NOAA asserted in the 2008 BiOp that the action agencies would rely on a number of tributary and estuary habitat, hydropower, and hatchery measures.\footnote{Id.} As Judge Redden observed, the 2008 BiOp required the federal action agencies to commit to specific habitat improvements, but it did not require them to identify specific projects.\footnote{Id.}

In September 2009, responding to the judge’s concerns about the 2008 BiOp, NOAA issued what it called an Adaptive Management Implementation Plan (AMIP), which added estuary restoration projects as well as research, monitoring, and evaluation.\footnote{Id.; FCRPS ADAPTIVE MANAGEMENT IMPLEMENTATION PLAN, 2008-2018 FEDERAL COLUMBIA RIVER POWER SYSTEM BIOLOGICAL OPINION 10 (Sept. 11, 2009).} However, in preparation for a November 23, 2009 meeting, Judge Redden sent letters to the parties, expressing concern that the AMIP, with its “unilateral, post decisional” development of new mitigation actions, research, monitoring, and evaluation, among other things, violated the “record review” rule required by the APA.\footnote{Letter to Parties, Nov. 18, 2009, ECF No. 1736 (Case No. 3:01-cv-00640-SI); Letter to Parties, Nov. 13, 2009, ECF No. 1735 (Case No. 3:01-cv-00640-SI).} The judge’s November 2009 letters encouraged NOAA to either persuade him that the AMIP was properly before the court or take steps to incorporate the document into the 2008 BiOp.\footnote{Letter to Parties 2, Nov. 13, 2009, ECF No. 1735 (Case No. 3:01-cv-00640-SI).} On February 19, 2010, Judge Redden granted NOAA’s request...
for a remand to incorporate the AMIP into the 2008 BiOp, and NOAA issued a supplemental BiOp integrating the AMIP later in 2010.

V. JUDGE REDDEN’S THIRD REMAND: THE 2008/2010 BIOP


In National Wildlife Federation v. National Marine Fisheries Service (NWF v. NMFS IV), numerous environmental groups challenged NOAA’s 2008/2010 BiOp. The environmental groups filed suit on three grounds, alleging that (1) the “trending toward recovery” jeopardy standard in the 2008/2010 BiOp was legally flawed; (2) NOAA failed to use the best available scientific data to measure the effects of hydropower operations and the benefits of proposed reasonable and prudent alternatives; and (3) the BiOp relied on actions that were not reasonably certain to occur. Judge Redden declined to address NOAA’s jeopardy standard and scientific methodologies, instead concluding only that the 2008/2010 BiOp relied on mitigation plans that lacked specificity and were unverifiable beyond 2013; therefore, NOAA relied on actions that were not reasonably certain to occur.

278 Id.
280 NWF v. NMFS IV, 2011 WL 3322793, at *5.
281 Id.
282 Id. at *6.
Judge Redden explained that the ESA prohibits NOAA from relying on actions not reasonably certain to occur, and that an agency may rely only on mitigation measures that “involve ‘specific and binding plans’” and “‘a clear, definite commitment of resources to implement those measures.’” The judge concluded that in the 2008/2010 BiOp NOAA had relied on habitat mitigation measures that were not specific or certain to occur, and had not even identified some of those measures. That is, although the BiOp authorized federal actions from 2008 to 2018, the agency failed to identify any specific habitat projects after 2013, instead assuming that it would later be able to identify and implement appropriate projects. NOAA defended its habitat mitigation measures as being “reasonably certain to occur” because it had committed to achieving specific, numerical improvements in listed species’ habitat quality and survival. However, after reviewing NOAA’s projected identification of projects, Judge Redden noted that unidentified mitigation measures failed to meet the “specific and reasonably certain to occur” standard. Worse, the judge observed that NOAA expected that the majority of mitigation measures it relied on to make its no jeopardy finding would not be identified and implemented until at least 2013.

Judge Redden proceeded to provide an unflattering summary of the agency’s position: “In other words, [NOAA] do[es] not know what exactly will be needed to avoid jeopardy beyond 2013, or whether those unknown actions are feasible and effective, but the [agency] promise[s] to identify and implement something. This is neither a reasonable, nor a prudent, course of

283 Id. (citing Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv. (NWF v. NMFS II), 524 F.3d 917, 935–36 (9th Cir. 2008) (finding that the agency’s “sincere general commitment to future improvements” was insufficient to support its no jeopardy conclusion)); 50 C.F.R. § 402.02.
284 Id.
285 Id. (“NOAA Fisheries relies on two types of habitat mitigation actions. The first includes specific, identified projects scheduled to occur between 2008 and 2013. The second, however, includes broad, unidentified categories of projects that Federal Defendants intend to develop and implement between 2013 and 2018.”).
286 Id. at *7.
287 Id.
288 Id.
He observed that the agency conceded that it could not identify any specific projects expected to occur between 2013 and 2018. He also determined that, in addition to improper reliance on habitat mitigation measures not reasonably certain to occur, NOAA’s estuary habitat mitigation program was also “plagued with uncertainty.” According to the judge, the agency again relied on survival improvements due to estuary habitat projects from unidentified actions.

Judge Redden concluded that, absent the benefits projected to result from the unidentified mitigation measures, there was no factual or rational basis for NOAA’s no-jeopardy decision beyond 2013. Further, he remarked that not only were the mitigation measures unidentified but, based on the agency’s unfortunate history of being unable to properly implement habitat improvements, NOAA failed to show that the mitigation projects were likely to materialize. The judge also observed that, in fact, the 2010 supplemental BiOp showed that habitat mitigation was already behind schedule, many habitat projects were delayed or cancelled, and funding for additional or replacement projects was potentially unavailable.

Judge Redden therefore rejected NOAA’s no-jeopardy decision, describing the agency’s approach to mitigation measures as “simply [a] promise to figure it all out in the future.” That approach, he stated, was “neither cautious nor rational.” Thus, he found the no jeopardy

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289 *Id.*
290 *Id.*
291 *Id.*
292 *Id.* (“Apart from a vague process for identifying replacement estuary projects if a particular action proves infeasible, there is no mechanism in the 2008 BiOp to ensure that the action agencies will implement specific projects in the 2013 to 2018 time frame or that ‘equally effective’ actions even exist.”).
293 *Id.* at *8.*
294 *Id.*
295 *Id.*
296 *Id.* at *9.*
297 *Id.*
decision for the entire ten-year term of the 2008/2010 BiOp to be arbitrary and capricious, expressing renewed concern about NOAA’s approach to protecting listed salmon species:

I continue to have serious reservations about NOAA’s . . . habitat mitigation plans for the remainder of this BiOp. Everyone agrees that habitat improvement is vital to recovery and may lead to increased fish survival, but the lack of scientific support for NOAA’s . . . specific survival predictions is troubling.

Judge Redden also noted that NOAA’s own scientists, as well as independent scientists who reviewed the 2008/2010 BiOp, were skeptical about the agency’s survival predictions.

As he had done with both the 2000 and 2004 BiOps, the judge remanded the 2008/2010 BiOp to NOAA for reconsideration but left the unlawful BiOp in place pending replacement. However, because he concluded that the 2008/2010 BiOp provided some protection for listed species through 2013, he ordered NOAA to fund and implement the BiOp until then. In so doing, Judge Redden explained, he was furthering protection of listed species, because vacating the 2008/2010 BiOp would remove beneficial measures that provided salmon with some minimal protection. The judge instructed NOAA to produce a new BiOp on Columbia Basin hydroelectric operations no later than January 1, 2014. Notably, in this, his final review of a hydropower BiOp, the judge acknowledged incremental improvements without foreclosing the

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298 Id.
299 Id. at *10.
300 Id. (“Although the [2008/2010] BiOp concludes that these specific survival improvements are necessary to avoid jeopardy, NOAA Fisheries’ own scientists, the independent scientists who reviewed the 2008 BiOp, and the Independent Scientific Advisory Board . . . have expressed skepticism about whether those benefits will be realized.”).
301 Id.
302 Id.
303 Id. at *9–10 (explaining that “[w]hen a biological opinion is unlawful, the ordinary remedy is to vacate and remand the BiOp to the action agencies for immediate reinitiation of consultation,” but that vacating the 2008/2010 BiOp “would be disastrous for the listed species.”).
304 Id. at *10. Judge Redden ordered that “[n]o later than January 1, 2014, NOAA Fisheries shall produce a new biological opinion that reevaluates the efficacy of the [reasonable and prudent alternatives] in avoiding jeopardy, identifies reasonably specific mitigation plans for the life of the biological opinion, and considers whether more aggressive action, such as dam removal and/or additional flow augmentation and reservoir modifications are necessary to avoid jeopardy.” Id.
possibility of more aggressive action, such as dam removal, flow augmentation, and reservoir modification.\textsuperscript{305}

After rejecting yet another BiOp, the Judge Redden once again retained jurisdiction, explaining that NOAA had a “history of abruptly changing course, abandoning previous BiOps, and failing to follow through with [its] commitments to hydropower modifications proven to increase survival (such as spill).”\textsuperscript{306} Based on the survival benefits associated with spill and NOAA’s “history of attempting to curtail spill without adequate justification,” Judge Redden also continued to order NOAA’s allies, BPA and the Corps, to maintain summer spill.\textsuperscript{307}

In October 2011, the federal agencies appealed Judge Redden’s rejection of the 2008/2010 BiOp. The case is pending in the Ninth Circuit.\textsuperscript{308}

\section*{VI. JUDGE REDDEN’S ROLE IN ESA IMPLEMENTATION}

Judge Redden’s oversight of the last decade of Columbia Basin hydropower BiOps exemplified judicial involvement in public law litigation. By ordering and participating in status conferences, retaining experts, and otherwise pursuing detailed factual information about the case, Judge Redden became the most influential participant in the saga of salmon protection


\textsuperscript{307} Id. at *12.

\textsuperscript{308} Case No. 11-35869 (9th Cir.).
efforts during the first years of the 21st century. Federal judges who assume such a role in natural
resources law litigation are rare.309

A. The “Managerial Judge”

The traditional model of the American judiciary is one in which the judge remains in the
background, a passive and impartial umpire.310 However, the perception of the judge as passive

309 Nevertheless, there have been a few federal judges willing to oversee complex remedies, including Judge George
H. Boldt, former Senior U.S. District Judge for the Western District of Washington. In the famous “Boldt decision,”
Judge Boldt ruled that the state of Washington violated the treaty rights of several Western Washington Indian tribes
by denying them a sufficient portion of their off-reservation fishery. United States v. Washington, 384 F.Supp. 312,
405–08 (W.D. Wash. 1974), aff’d, 520 F.2d 676 (9th Cir. 1975), cert. denied, 423 U.S. 1086 (1976). According to
the judge, the treaties entitled Indians to a “fair share” of the fish resources at “all usual and accustomed places.” Id.
at 331. He held that “fair share” meant an “equal share” of 50% of the off-reservation fishery at usual and
accustomed fishing grounds. See id. at 343.

Judge Boldt rejected the idea that Indian treaty rights changed upon the granting of statehood to
Washington, or by subsequent federal legislation, id. at 354, instead finding that treaty rights were binding on the
states. Id. at 337. The judge proceeded to reserve jurisdiction over remedies to ensure state compliance with his
decision. Id. at 347. Judge Boldt explained that

[subject to suggested limitations by some of the parties, all parties have urged that the court
reserve continuing jurisdiction of this case and have suggested various ways in which such
jurisdiction might be exercised. . . . From the beginning most, if not all, counsel in this case and
the court have anticipated that continuing jurisdiction would be of great value to all parties in
promptly putting the court’s rulings into effect and in providing readily available early hearing and
determination of factual and legal questions that may arise in interpreting and applying such
rulings.

Id. He thus provided an elaborate declaration of judgment and decree, as well as an injunction. Id. at 405–20. In
ensuing years, Judge Boldt was forced to literally run the western Washington fishery when the state claimed that it
lacked the authority under state law to implement his decree. See id. at 693 (Burns, J., concurring) (“As was
suggested at oral argument, any decision by us to affirm also involves ratification of the role of the district judge as a
‘perpetual fishmaster.’ Although I recognize that district judges cannot escape their constitutional responsibilities,
however unusual and continuing duties imposed upon them, I deplore situations that make it necessary for us to
become enduring managers of the fisheries, forests, and highways, to say nothing of school districts, police
departments, and so on.”).

310 See, e.g., Marcus, supra note 153, at 4. The New Yorker reported in 2009 that at his senate confirmation
hearings, now Chief Justice John Roberts discussed the judiciary’s role in terms of passivity and impartiality:
‘‘Judges are like umpires,’’ Roberts said at the time. ‘‘Umpires don’t make the rules. They apply them. The role of an
umpire and a judge is critical. They make sure everybody plays by the rules. But it is a limited role. Nobody ever
went to a ballgame to see the umpire.’’ See Jeffrey Toobin, No More Mr. Nice Guy, THE NEW YORKER (May 25,

However, serving as an umpire is not always consistent with the quest for justice. As Judge Marvin
Frankel, district judge, for the Southern District of New York, stated: “Many judges, withdrawn from the fray, watch
it with benign and detached affection, chuckling nostalgically now and then as the truth suffers injury or death in the
has evolved considerably in recent years because many judges have been thrust into a more active role. Thus, Judge Richard Posner recently commented that “[j]udges, by the way, are not wallflowers or potted plants.” To describe this more active judicial role, Professor Judith Resnik coined the phrase “managerial judge” in 1982, and her terminology has since become commonplace.

“Managerial judging” evolved to address an increase in the volume of judges’ work and greater complexity in cases by expediting dispute resolution and encouraging settlement. Therefore, prototypical managerial decisions are essentially methods of allocating limited resources—often by disposing of cases through settlement rather than trial. That objective of quick dispositions is often scorned, and, from inception, managerial judging has been linked to judicial activism, a longstanding object of criticism from some quarters.

311 See, e.g., Marjorie O. Rendell, What Is the Role of the Judge in Our Litigious Society?, 40 VILL. L. REV. 1115, 1118 (1995) (“To say that the discrete role of judges in 1995 is to preside over trials is like saying that the role of women in the 1990s is to care for the home. Surely, we do that, but we do so much more.”); Elizabeth G. Thornburg, The Managerial Judge Goes to Trial, 44 U. RICH. L. REV. 1261, 1265 (2010) (referring to the concept of a passive judge as “nostalgic”).
312 See Judith Resnik, Managerial Judges, 96 HARV. L. REV. 374, 376 (1982) (“Many federal judges have departed from their earlier attitudes; they have dropped the relatively disinterested pose to adopt a more active, ‘managerial’ stance.”).
313 Tagatz v. Marquette Univ., 861 F.2d 1040, 1045 (7th Cir. 1988).
315 See Thornburg, supra note 311, at 1267 (stating that Professor Resnik’s phrase “managerial judge” “has become a standard part of civil procedure vocabulary”).
316 See Resnik, supra note 312, at 379 (“Partly because of their new oversight role and partly because of increasing case loads, many judges have become concerned with the volume of their work.”).
317 See Chayes, supra note 19, at 1298 (remarking that “[t]he litigation is often extraordinarily complex and extended in time”).
318 See Thornburg, supra note 311, at 1267 (discussing the process of judicial case management as “using various procedural tools to speed the process of dispute resolution and encourage settlement”).
319 See E. Donald Elliot, Managerial Judging and the Evolution of Procedure, 53 U. CHI. L. REV. 306, 311 (1986) (“The prototypical ‘managerial’ decision is one that allocates limited resources. The notion that judges are to decide certain issues as ‘managers’ implies that they must take into account the hard economic reality that procedural resources are limited . . . .”).
320 See Resnik, supra note 312, at 379 (remarking that “judges have begun to experiment with schemes for speeding the resolution of cases and for persuading litigants to settle rather than try cases whenever possible”).
321 See Rubenstein, supra note 314, at 417 (asserting that Resnik was quite critical of the judiciary’s attempts to deal with these changes through this new form of what she labeled ‘judicial activism’”). See, e.g., William Wayne, The
However, criticisms of pretrial judicial management should not extend to judges’ involvement in complex, post-trial remediation.

In her seminal article on managerial judging, Professor Resnik distinguished between pretrial judicial management and post-trial assignment of remedies,\textsuperscript{322} describing the latter as a necessary response to the assertion of novel legal rights and proliferation of public law cases.\textsuperscript{323} Compared to pretrial managerial judging, Professor Resnik asserted, post-trial supervision is more visible to the public, and therefore more legitimate.\textsuperscript{324} In other words, she saw managerial judging was more appropriate in the remedies phase than before or during a trial. In addition, Professor Resnik claimed that the bulk of detailed post-trial remediation occurs in public law cases, in which the defendants are federal or state agencies, and thus judges are constrained by their obligation to respect the agencies’ autonomy in decisionmaking.\textsuperscript{325} That constraint provides guidance for managerial courts.

\textbf{B. Public Law Litigation}

Litigation on behalf of the public began in earnest in the 1960s and 1970s, when Congress enacted statutes organizing administrative oversight of important public interests,
including environmental preservation, and public groups acquired the resources to pursue social objectives through use of the legal system. In addition, several environmental protection statutes encouraged public law litigation by authorizing “citizen suits” and providing for awards of attorneys’ fees. Suits based on environmental statutes that provide attorneys’ fees have been termed “private attorney general actions,” in which public interest groups step into the role of a public enforcer. As a result of a proliferation of those cases, Professor Carl Tobias asserted that “public interest litigants have become institutionalized participants in administrative proceedings and in courtroom litigation challenging agency activity.”

In 1976, analyzing changing aspects of litigation and law, Professor Abram Chayes introduced the concept of “public law litigation.” Under the model he sketched, public law

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327 See Tobias, supra note 158, at 278–79 (“The antecedents of many of today’s public interest litigants gradually grew from the time the Rules became effective. Only in the 1960s, however, did these entities begin to secure the requisite resources to support substantial expansion of their operations and to plan extensively for the type of suits now considered public law litigation.”). See also Edward J. Brunet, A Study in the Allocation of Scarc Judicial Resources: The Efficiency of Federal Intervention Criteria, 12 GA. L.REV. 701 (1978) (suggesting that public interest groups may best provide valuable input by intervening in cases).
329 See Tobias, supra note 158, at 285.
330 See, e.g., Jan Chatten-Brown & Douglas Carstens, Practicing Public Interest Environmental Law in the Private Sector, 38 No. 5 ABA TRENDS 8 (2007) (“In many environmental legal challenges, irreplaceable resources are protected, but no damages are sought or awarded. Therefore, it is a challenge for nonprofits and community groups to fund public interest litigation to protect the environment. Private attorney general actions, or reliance on statutes that provide for attorneys’ fees, is possible. At the federal level, statutes such as the [Clean Water Act] and the ESA provide for such private enforcement with statutory fee provisions. Moreover, where the statute underlying the litigation does not provide such fees (e.g., [the National Environmental Policy Act]), fees are awardable pursuant to statutes such as the Equal Access to Justice Act.”). See also Edward J. Brunet, The Primacy of Private Attorney General Enforcement in the United States, INDIAN JOURNAL OF ALTERNATIVE DISPUTE RESOLUTION (forthcoming 2012); Stephen B. Burbank, Sean Farhang & Herbert M. Kritzer, Private Enforcement of Statutory and Administrative Law in the United States (and Other Common Law Countries), SCHOLARSHIP AT PENN LAW, UNIVERSITY OF PENNSYLVANIA LAW SCHOOL (Nov. 16, 2011).
331 See Tobias, supra note 158, at 293. According to Professor Tobias, the rise in public interest litigation “has generated new forms, understandings, relationships, and difficulties. Indeed, public law litigation may have transformed conventional understandings of adjudication, of the judicial function, and of the components of a lawsuit.” Id. at 296.
332 Professors Eisenberg and Yeazell argue that it is the rights public interest litigants are vindicating that are new, not the remedies. See Theodore Eisenberg & Stephen C. Yeazell, The Ordinary and the Extraordinary in Institutional Litigation, 93 HARV. L. REV. 465, 516 (1980). Professors Eisenberg and Yeazell explained that they “do not deny that courts have been up to new things, but we conclude that the novelty flows from the new rights
litigation differed from traditional adjudication in several essential ways, including its broad scope, party structure, concentration on future conditions, concern over public consequences, negotiated remedy, and the fact that the judge is responsible for “credible fact evaluation” and for “shaping the litigation to ensure a just and viable outcome.”

Professor Tobias subsequently identified two types of public law litigation: (1) institutional reform litigation, which seeks to restructure aspects of institutional performance, and (2) public interest litigation, which challenges the decisionmaking of federal administrative agencies. In the latter, judges assume the role of ensuring that government actions are consistent with public values, plaintiffs typically pursue relief affecting numerous people, including many nonparties and even institutional structures, and defendants are usually large bureaucratic institutions. Public interest remedies are often quite complex, requiring ongoing judicial created rather than from the remedies employed. Twenty-five years ago few thought the Constitution guaranteed mental patients clean sheets or prisoners’ hearings before parole revocation. Having found such rights implied by the Constitution, courts have reached for a remedial arsenal fitted out centuries ago for service in other wars.”

Chayes, supra note 19, at 1302. Professor Chayes specifically identified eight characteristics of public law litigation as differing from traditional litigation: (1) the scope of the lawsuit is not uniform but rather shaped primarily by the court and parties; (2) the party structure is “sprawling and amorphous,” involving more than just two parties; (3) the fact inquiry looks not to past occurrences, but to future effects of the litigation; (4) relief is forward looking and fashioned on flexible and broadly remedial lines, “often having important consequences for many persons including absentees”; (5) the “remedy is not imposed but negotiated”; (6) administration of a decree requires the judge’s continuing participation; (7) the judge is not passive but active, “with responsibility not only for credible fact evaluation but for organizing and shaping the litigation to ensure a just and viable outcome”; and (8) the suit is not about private rights, but about public policy. Id.

Tobias, supra note 158, at 279–83 (providing an overview of institutional reform litigation and distinguishing between the two types of public law litigation). Professor Tobias asserted that “the judge purportedly is a public officer ‘empowered by the political agencies to enforce and create society-wide norms, and perhaps even restructure institutions, as a way . . . of giving meaning to our public values.’” See id. at 282 (quoting O. Fiss, The Supreme Court, 1978 Term-Foreword: The Forms of Justice, 93 HArv. L. Rev. 1, 31 (1979)).

Tobias, supra note 158, at 280 (observing that public interest plaintiffs “typically pursue relief that could affect numerous people not before the court as well as institutional, political, and economic structures,” and “[d]efendants generally are large bureaucratic institutions or agencies of the federal, state, or local government, such as prisons or schools. The subject matter of these lawsuits usually is the policy, practice, operation, or decisionmaking of those entities—in essence, a dispute over the conduct or content of public policy.”).
participation and novel mechanisms for resolution.\textsuperscript{336} For example, the Ninth Circuit explained in 2007 that

\begin{quote}
[w]here the public interest is involved, ‘equitable powers assume an even broader and more flexible character than when only a private controversy is at stake.’ Unless Congress provides otherwise, ‘[c]ourts of equity may, and frequently do, go much farther both to give and withhold relief in furtherance of the public interest than they are accustomed to go when only private interests are involved.’\textsuperscript{337}
\end{quote}

Thus, the nature of public interest litigation has not escaped federal judges, including Judge Redden.

\textit{C. Judge Redden’s Management of the Hydropower BiOps}

Litigation over the Columbia Basin hydroelectric BiOps is an archetypal example of Professor Chayes’ “public law litigation.”\textsuperscript{338} Disputes over hydropower management have been extremely broad in scope, spanning more than two decades,\textsuperscript{339} including numerous interested parties representing government agencies, states, industries, environmental protection, and conservation for public use, among others, and affecting several million people as well as more than a dozen species of listed salmonids.\textsuperscript{340} In addition, the inquiry into the permissibility of hydropower BiOps is primarily forward-looking—in other words, the case revolves around the

\textsuperscript{336} See \textit{id.} at 281 (asserting that public interest litigation often requires significant and ongoing judicial involvement).

\textsuperscript{337} Nw. Envtl. Def. Ctr. v. Bonneville Power Admin., 477 F.3d 668, 680 (9th Cir. 2007) (quoting United States v. Alisal Water Corp., 431 F.3d 643, 654 (9th Cir. 2005) and U.S. v. Coca-Cola Bottling Co. of L.A., 575 F.2d 222, 228 (9th Cir. 1978)).

\textsuperscript{338} See generally Chayes, \textit{supra} note 19.


\textsuperscript{340} See \textit{supra} note 20 for a list of defendants and defendant-intervenors, \textit{supra} note 121 for a list of plaintiffs, and \textit{supra} note 59 for a source demonstrating that thirteen species of Columbia Basin salmonids are listed under the ESA.
future of listed salmonids, not the past acts of government agencies. Further, review of overlapping BiOps required continuing supervision from both Judge Marsh and Judge Redden, and Judge Redden extended his influence over the remand process as well as review of the completed BiOps. Finally, litigation over dam operations and salmon protection is about public policy, rather than private rights. Therefore, it is appropriate to consider Judge Redden’s role in the salmon saga in light of the unique qualities of public law disputes.

Another important aspect of the judge’s management of BiOp review is that his in-depth involvement took place after litigation had reached some point of termination—here the repeated disposition was remand of an unlawful BiOp. Thus, Judge Redden’s overview should be considered in light of scholarship analyzing post-trial remediation. Indeed, as Professor Resnik predicted, Judge Redden’s supervision of remedies in the hydropower BiOp litigation has been characterized by visibility in the form of publicly available transcripts of meetings, as well as accountability and deference to government agencies. By involving the plaintiffs in discussions of developing and improving the BiOps, the judge made NOAA more accountable for consideration of salmon survival and also fostered a more transparent process of analysis.

Despite rejecting three consecutive BiOps as unlawful, Judge Redden remained deferential to the government agencies throughout his decade of involvement with the case. For

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341 See, e.g., supra note 257 for Judge Redden’s statement that his objective was to “help endangered salmon and steelhead.”
342 For a review of Judge Redden’s remands of the hydropower BiOps, see supra notes 121–43, 189–218, 279–308 and accompanying text.
343 For a review of remands of the hydropower BiOps, see supra notes 121–43, 189–218, 279–308 and accompanying text.
344 See supra notes 314–25 for a discussion of Professor Resnik’s distinction between pretrial “managerial judging” and post-trial supervision of remediation.
345 See supra notes 144–52, 238–278 and accompanying text for a review of Judge Redden’s management of the BiOps on remand, including discussion of meetings that involved both plaintiffs and defendants.
346 For a review of Judge Redden’s remands of the hydropower BiOps, see supra notes 121–43, 189–218, 279–308 and accompanying text.
example, he deferred to NOAA’s expertise on matters of interpreting scientific results\(^{347}\) and granted the agency’s request to leave the BiOps in place on remand.\(^{348}\) Additionally, Judge Redden limited his directives, reaching only the questions necessary for him to determine an outcome.\(^{349}\) In sum, the judge appropriately permitted public review of policy questions concerning the balance between economic interests and preservation and restoration of endangered species, and he did so while exercising considerable self-restraint and demonstrating respect for the parties.

In his review of the 2000, 2004, and 2008/2010 hydropower BiOps and his fashioning of remedies intended to protect listed salmon,\(^{350}\) Judge Redden demonstrated a commitment to ensuring compliance with the ESA. As the judge stated in 2011 in his final opinion in this case, his purpose in following the BiOps on remand was to help NOAA arrive at a lawful BiOp and, by doing so, to prevent the extinction of listed salmonids as well as to avoid future litigation.\(^{351}\) He thus shepherded revision of the BiOps on remand, encouraging the agency to make concrete progress that would avoid more litigation.\(^{352}\) Unfortunately, without close judicial scrutiny, NOAA had little incentive to change status quo operations by making the BiOps more protective

\(^{347}\) See, e.g., supra note 239 and accompanying text (granting deference to the agency’s scientific judgment and thus approving its proposals for early spring spill, and also summer spill).

\(^{348}\) See, e.g., supra note 141 for an overview of Judge Redden’s decision not to vacate the 2000 BiOp.

\(^{349}\) See, e.g., supra note 189 (explaining that the four issues he had considered were dispositive, so he would not reach the others raised by the plaintiffs).

\(^{350}\) For a review of Judge Redden’s involvement with the hydropower BiOps, see supra notes 144–52, 238–278 and accompanying text.

\(^{351}\) See supra note 257 (“I have no desire to remand this [BiOp] for yet another round of consultation. The revolving door of consultation and litigation does little to help endangered salmon and steelhead.”).

\(^{352}\) See supra notes 144–52, 238–278 and accompanying text (discussing Judge Redden’s involvement with the parties on remand). As Justice William Wayne of the U.S. District Court for the Eastern District of Texas has opined on a related note:

> [L]itigation is a poor alternative to capable and caring performance by the state officials in the first instance. But [in some instances] litigation may be the only way to bring justice to the continuously expanding number of victims of the state’s malfeasance.

See Wayne, supra note 321, at 12.
of salmon, since status quo federal hydroelectric operations benefitted powerful economic interests. Further, NOAA and the other federal action agencies are not only resistant to change but also quite aware that a reviewing court is unlikely to reject a BiOp outright, thus exposing them to liability for take of listed species. Anyway, regardless of concern for repercussions to the agencies, enjoining a BiOp that contains at least some protections for listed species may be more detrimental than leaving an unlawful BiOp in place.

Where a party has demonstrated protracted resistance to change—certainly the case concerning the Columbia Basin salmon saga—and a public interest case is complex, continuing judicial supervision is justified. In this case, after receiving a third BiOp that he deemed incapable of ensuring the survival of listed salmon, Judge Redden indicated frustration, referring to aspects of the 2008/2010 BiOp as “troubling” and “neither cautious nor rational.” His disappointment seemed almost an echo of his earlier reflection that the balance of habitat degradation and offsets in the 2004 BiOp was “unrealistic,” and that the BiOp itself was merely the “disappointing result” of remand of the 2000 BiOp. In turn, Judge Redden’s statements about the 2004 and 2008/2010 BiOps appeared were a continuation of Judge Marsh’s observations.

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353 See supra note 4 for examples of powerful groups that have intervened on behalf of NOAA, supporting the agency’s hydropower BiOps. Professor Resnik has explained that “[t]he issues in public law cases are complex and often depressing. Third parties may impede implementation efforts, and fiscal constraints may limit defendants’ flexibility to respond promptly to court decrees. Thus, even if personally sympathetic to plaintiffs' claims, and even if angered by defendants' disobedience, judges find it politic and appropriate to exercise restraint.” See Resnik, supra note 312, at 413.

354 See supra note 137, 141 for a discussion of Judge Redden’s decision to leave unlawful BiOps in place during the remand period which asserts that “curtail[ing] Columbia Basin hydroelectric operations could significantly damage the ‘economic and social fabric of the region’ by exposing action agencies to ESA liability for the take of salmon.” Opinion 2, July 1, 2003, ECF No. 439-2 (Case No. 3:01-cv-00640-SI).

355 See supra note 12.

356 See Wayne, supra note 321 at 7 (“I firmly believe that when a defendant exhibits a stubborn and perverse resistance to change, extensive court-ordered relief is both necessary and proper.”).

357 See also Eisenberg & Yeazell, supra note 332, at 494 ( remarking that “intransigence and the complex nature of the institutions involved [may] make detailed decrees and some level of supervision inevitable”).

358 See supra note 304 and accompanying text.

359 See supra note 302 and accompanying text.

360 See supra note 213 and accompanying text.

361 See supra note 190 and accompanying text.
opinion that the situation of dam operations “literally cries out for a major overhaul.” Regrettably, NOAA has yet to make the headway in protecting listed salmon species that both judges called for, and that failure now brings a third federal district judge into the role of ensuring that the agency’s BiOps comply with the ESA. Continued close judicial oversight seems necessary if the federal Columbia River hydroelectric system is to operate in a manner consistent with the ESA’s goal of recovering listed salmon.

VII. CONCLUSION

Judge Redden’s oversight of the Columbia Basin saga is a quintessential example of the managerial judging paradigm advanced by Professors Chayes and Resnik. Instead of taking an active role in fashioning remedies, he might have merely declared that the federal BiOps on federal Columbia Basin hydroelectric operations failed to satisfy the ESA and let NOAA and the federal action agencies figure out how to comply with the statute. But, possibly because he let stand parts of the BiOps, particularly the incidental take authorizations, he took responsibility for giving structure to the agency’s approach to the remand periods. Holding conferences with counsel, writing frequent letters concerning issues he wanted the BiOps to address, requiring agency implementation reports on a quarterly basis, and directing studies on the spill

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362 See supra notes 94–95 and accompanying text.
363 See Chayes, supra note 19; Resnik, supra note 312. In other words: “‘Judge Redden has done more for wild salmon than three presidents, five federal agencies and 10 Congresses combined,’ says Idaho Rivers United Executive Director Bill Sedivy. ‘By demanding that federal salmon managers follow sound science and the law, he has been a tremendous force in slowing the extinction of wild salmon in Idaho and the Northwest.’” Aaron Kunz, Judge Redden To Step Away from Columbia Salmon, Hydro Case, BOISE STATE PUBLIC RADIO/IDAHO PUBLIC TELEVISION (Nov. 23, 2011), http://earthfix.opb.org/water/article/judge-redden-to-step-away-from-columbia-salmon-hyd/.
364 See supra note 141 and accompanying text.
365 See supra notes 144–52, 238–278 and accompanying text.
366 See supra notes 144–52, 238–278 and accompanying text.
367 See supra notes 155–57 and accompanying text.
program he ordered, Judge Redden was an active participant in overseeing agency ESA implementation. He also established several institutional innovations, such as an attorneys’ steering committee, which allowed him to frame specific questions to the agencies and helped to shed public light on the otherwise closed proceedings. Further, Judge Redden made significant use of a science advisor to help him understand the scientific complexities of the case and delve deeply into potential remedies.

To move the parties toward resolution, Judge Redden gave specific instructions during a steering committee hearing about issues that the agencies needed to confront during the remand of the 2000 BiOp; provided an early indication of the infirmities of the 2004 BiOp during a status conference; identified issues in advance on which he wanted oral argument on the 2008 BiOp to focus; and suggested in one of his letters that the 2010 “adaptive management implementation plan” amendments to the 2008 BiOp had APA problems. In all of these situations, he was acting as a managerial judge, shaping the parties’ responses to his opinions and attempting to preempt future litigation—as well as the extinction of Columbia Basin salmonids—by helping the parties arrive at solutions.

Judge Redden’s managerial judging was not the only remarkable aspect of his Columbia Basin salmon oversight. Perhaps because he retained jurisdiction over the case for over a decade, the judge developed a healthy skepticism concerning the federal agencies’ focus on affecting hydroelectric operations only minimally. Like his predecessor, Judge Marsh, who questioned the

368 See supra note 246 and accompanying text.
369 See supra note 144 and accompanying text.
370 See supra note 157 and accompanying text. Dr. Horton’s technical advice assisted Judge Redden with many aspects of his decisions, including his orders to continue spill.
371 See supra notes 147–52 and accompanying text.
372 See supra notes 173–79 and accompanying text.
373 See supra notes 255–77 and accompanying text.
374 See supra notes 273–75 and accompanying text.
agencies’ willingness to risk species jeopardy, Judge Redden was unimpressed with the agencies’ attempts to buy off plaintiffs and deflect attention from their unwillingness to significantly change dam operations through elaborate habitat restoration plans. Unlike Judge Marsh, however, he would not defer to their claimed expertise, so he ultimately rejected three consecutive BiOps. Although Judge Redden avoided reaching some issues—notably NOAA’s claim that it could satisfy the ESA’s “no jeopardy” directive if hydropower operations merely “trend[ed] toward recovery,” in his remand of the 2008/2010 BiOp, he refused to allow the agency to approve a ten-year plan based largely on nonspecific good intentions and a tenuous link between habitat restoration efforts and salmon survival improvements. Thus, although the judge’s successor will no doubt have to confront some of the issues that Judge Redden avoided, he will also have the benefit of following on the heels of Redden’s careful rejections of the 2000, 2004, 2008/2010 BiOps.

After retiring, Judge Redden, somewhat surprisingly, indicated that he thought the most effective means of restoring Columbia Basin salmon would be to remove the four Corps of Engineers’ dams on the lower Snake River, which is the Columbia’s principal tributary. The alternative of removing the lower Snake dams has been widely considered for at least fifteen years, but that option faces considerable political opposition. Still, endorsement of dam removal by the most prominent independent reviewer of the Columbia River salmon saga gives

375 See supra notes 83–96 and accompanying text.
376 See supra note 262.
377 See supra note 201.
378 See supra notes 193, 279–308 and accompanying text.
379 See supra notes 279–308 and accompanying text. One of us has suggested that the federal agencies’ “good intentions” are more accurately described as deceptive practices. See Practicing Deception, supra note 12.
380 See supra note 5 for Judge Redden’s 2012 statement about removing the dams.
382 Id. at 246–50 (reviewing NOAA’s decision not to breach dams and discussing political opposition to dam breaching).
hope that this long-running and contentious dispute may one day reach a satisfactory resolution that restores the Northwest’s signature natural resource.

At the end of the day, however, we are left with disquieting questions about the limited capacity of judicial oversight—even from a judge committed to managerial judging and one willing to give close scrutiny to agency allegations of expertise in an exceedingly complex problem—to effect real change to benefit ESA-listed species. For nearly a decade, Judge Redden consistently told NOAA and action agencies like BPA and the Corps that they were violating the ESA, and he used the remand periods to structure their responses to his opinions. But although he called for significant changes in the operation of the federal Columbia Basin hydroelectric system, apart from requiring a spill program to facilitate salmon passage at the dams, he never ordered specific operational changes. Today, status quo dam operations largely continue to inflict high salmon mortalities, and they do so over two decades after a determination that more than a dozen species of Pacific salmonids require ESA protection.

The Columbia Basin salmon saga is perhaps a paradigmatic example of the limits of judicial review to effectuate real improvements in complex natural resources cases where administrative agencies are committed opponents of that change. It may be that the deception agencies like NOAA and BPA have practiced for so long is simply more powerful that a reviewing judge—even one who sees behind the deception. Years of judicial oversight convinced Judge Redden that the solution to the problem of most of the imperiled salmon runs was removal of the four federal dams on the lower Snake River, which some studies have concluded is both an ecological and economically affordable solution. But neither Judge

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383 See supra notes 160–72 and accompanying text.
384 For example, the FPC has noted that Snake River salmon runs maintained themselves between 1958 and 1968, but that after construction of the lower Snake dams and the John Day Reservoir, they were no longer sustainable. See State of Idaho, Office of the Governor, Endangered Snake River Spring & Summer Chinook Salmon—Causes
Redden nor his successor has the authority to order removal of those congressionally authorized dams. Only Congress can do that. And given the long odds of congressional intervention, we may be left with many more years of ESA litigation in which the federal agencies operating the largest interconnected system of dams in the world continue an expensive charade of pretending to be serious about restoring Columbia Basin salmon while maintaining hydropower dominance. The result of that stalemate may very well be the extinction of some species of listed salmonids, which is obviously irreparable. This disturbing reality is what Judge Redden’s successor will soon confront.\textsuperscript{385}