ENVIRONMENTAL LAW — ENDANGERED SPECIES ACT — DISTRICT OF OREGON INVALIDATES BIOLOGICAL OPINION FOR FEDERALLY OPERATED DAMS ON COLUMBIA RIVER. — *National Wildlife Federation v. National Marine Fisheries Service*, No. CV 01-00640-RE, 2011 WL 3322793 (D. Or. Aug. 2, 2011).

In the Pacific Northwest, salmon provide both a way of life and grounds for endless litigation. Legal disputes over the fish are "part of the modern cycle of life in the Columbia River System." The latest court ruling on the issue makes clear that the fight over salmon and another important resource — hydroelectric power from dams — is far from over. Recently, in *National Wildlife Federation v. National Marine Fisheries Service*, the U.S. District Court for the District of Oregon remanded a biological opinion on the effect of Columbia River dams on endangered salmon species, holding that the opinion relied on unacceptably speculative mitigation actions but allowing it to stay in place through 2013. Although the decision laudably combines a strong ruling with pragmatic reasoning and an evenhanded remedy, it puts off the inevitable reckoning over whether and how agencies can operate dams without driving salmon into extinction.

The Columbia River conflict is only the most high-profile manifestation of a growing unease about the environmental and economic costs of dams: 241 dams were demolished nationwide between 2006 and 2010.⁴ For centuries, salmon have been not just the "cultural and spiritual soul of the Pacific Northwest" but also a powerful economic force.⁶ Dam construction, however, sent already-struggling salmon populations into freefall, and by 1990 wild salmon numbers were "careening downhill." The Columbia River dams provide hydropower and irrigation, as well as a channel to the improbable inland seaport of Lewiston, Idaho⁸ — but they are also "historically the central and unquestionably the most lethal factor" in salmon mortality, blocking access to upriver spawning grounds and killing salmon in their tur-

¹ Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 422 F.3d 782, 788 (9th Cir. 2005).

² No. CV 01-00640-RE, 2011 WL 3322793 (D. Or. Aug. 2, 2011).

³ A biological opinion is a report required under the Endangered Species Act assessing whether a federal agency action is likely to jeopardize any listed species. *See* 16 U.S.C. § 1536(a)(2) (2006) (laying out consultation requirements); 50 C.F.R. § 402.02 (2010) (defining "biological opinion").

⁴ Juliet Eilperin, *Elwha Dam Removal Illustrates Growing Movement*, WASH. POST, Sept. 16, 2011, http://www.washingtonpost.com/national/health-science/elwha-dam-removal-illustrates-growing-movement/2011/09/13/gIQAZFjtYK_story.html.

 $^{^{5}\,}$ Michael C. Blumm, Sacrificing the Salmon 1 (2002).

⁶ See id. at 5-6.

⁷ John M. Volkman, How Do You Learn From a River? Managing Uncertainty in Species Conservation Policy, 74 WASH. L. REV. 719, 728 (1999).

⁸ See BLUMM, supra note 5, at 281 (arguing that the dams' benefits are greatly overstated).

bines.⁹ In the last two decades, Columbia River salmon have been the focus of the most costly biological restoration project ever.¹⁰

Since the listing of several salmon species as endangered in the past twenty years, the Endangered Species Act of 1973¹¹ (ESA) has played a substantial role in the dispute.¹² The "action agencies"¹³ operating the fourteen federally operated dams in the Federal Columbia River Power System (FCRPS)14 have long struggled to manage the dams without unlawfully jeopardizing salmon. As required by section 7 of the ESA, these agencies consulted with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (now NOAA Fisheries), which issued a 2000 biological opinion concluding that dam operations would jeopardize several salmon species.¹⁵ Pursuant to section 7(b), NOAA Fisheries offered "reasonable and prudent alternative[s]" (RPAs) to mitigate the dams' harm. 16 In 2003, when the National Wildlife Federation and other groups challenged the biological opinion under the judicial review provisions of the Administrative Procedure Act¹⁷ (APA), Judge Redden of the District of Oregon remanded it to NOAA Fisheries, holding that the RPAs impermissibly relied on salmon habitat improvement measures that were not reasonably certain to occur or had not undergone agency consultation.¹⁸

In 2004, NOAA Fisheries issued a substantially different biological opinion, finding that the dams as then operated would not jeopardize species.¹⁹ This iteration found most dam operations nondiscretion-

⁹ Arthur D. Smith, Programmatic Consultation Under the Endangered Species Act: An Anatomy of the Salmon Habitat Litigation, 11 J. ENVTL. L. & LITIG. 247, 255 (1996).

¹⁰ Michael C. Blumm & Greg D. Corbin, Salmon and the Endangered Species Act: Lessons from the Columbia Basin, 74 WASH. L. REV. 519, 521 (1999).

¹¹ 16 U.S.C. §§ 1531–1544 (2006 & Supp. III 2009).

¹² See generally Blumm, supra note 5, at 173–217. The National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) has listed thirteen salmon and steelhead species on the Columbia as threatened or endangered since 1991. NOAA FISHERIES, F/NWR/2005/05883 ENDANGERED SPECIES ACT SECTION 7(A)(2) CONSULTATION BIOLOGICAL OPINION AND MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT ESSENTIAL FISH HABITAT CONSULTATION 1.3–4 (2008).

¹³ Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv. (*Nat'l Wildlife Fed'n I*), 254 F. Supp. 2d 1196, 1199 n.3 (D. Or. 2003). These agencies are the Army Corps of Engineers, the Bonneville Power Administration, and the Bureau of Reclamation. *Id*.

¹⁴ Id. at 1200.

¹⁵ *Id.* at 1199. Biological opinions are technically not legally binding, but they have a "virtually determinative effect" and an action agency disregards them "at its own peril," risking ESA penalties for unauthorized takings of endangered species. Bennett v. Spear, 520 U.S. 154, 170 (1997).

¹⁶ Nat'l Wildlife Fed'n I, 254 F. Supp. 2d at 1199. Biological opinions that make a jeopardy finding are required to provide a "reasonable and prudent alternative." See Endangered Species Act § 7(b)(3)(A).

¹⁷ 5 U.S.C. §§ 551–559, 701–706 (2006).

¹⁸ Nat'l Wildlife Fed'n I, 254 F. Supp. 2d at 1215.

¹⁹ Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv. (*Nat'l Wildlife Fed'n III*), 524 F.3d 917, 922–23 (9th Cir. 2008).

ary — essentially exempting the dam operations from analysis.²⁰ Again the same plaintiffs challenged the biological opinion, and again Judge Redden invalidated it.²¹ The Ninth Circuit affirmed, finding that the action agencies had "considerable discretion" over how the dams operated and that NOAA Fisheries needed to include those operations in its analysis.²²

NOAA Fisheries tried again with a 2008 biological opinion, supplemented in 2010.²³ The latest document concluded that, with the action agencies' habitat mitigation plans, continued dam operations were not likely to jeopardize the existence of any endangered species through 2018.²⁴ To achieve the "significant survival improvements necessary to avoid jeopardy," NOAA Fisheries relied on both "specific, identified projects" between 2008 and 2013 and "broad, unidentified categories of projects" the action agencies planned to devise between 2013 and 2018.²⁵ NOAA Fisheries believed both categories were necessary to avoid jeopardy, and in fact the majority of predicted survival improvement came from as-yet unidentified mitigation projects.²⁶ However, habitat mitigation currently underway was already behind schedule, with several projects cancelled and funding for others unavailable.²⁷ Estuary survival benefits were only one-quarter of what was expected because of infeasible and delayed projects.²⁸ The National Wildlife Federation and its co-plaintiffs challenged the new biological opinion, arguing that it was arbitrary and capricious.²⁹

Judge Redden remanded for a third time but let the biological opinion remain in effect through 2013.³⁰ Because a biological opinion is a final agency action, the court evaluated it under the APA's arbitrary and capricious standard.³¹ The ESA requires that NOAA Fisheries consider in its analysis the effects of only those actions that are "reasonably certain to occur."³² The court held that the biological opinion

²⁰ Id. at 926.

²¹ Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv. (*Nat'l Wildlife Fed'n II*), Nos. CV 01-640-RE, CV 05-23-RE, 2005 WL 1278878, at *3 (D. Or. May 26, 2005).

²² Nat'l Wildlife Fed'n III, 524 F.3d at 923, 929. The court called the 2004 biological opinion "little more than an analytical slight [sic] of hand." Id. at 933.

²³ Nat'l Wildlife Fed'n, 2011 WL 3322793, at *4; see NOAA FISHERIES, supra note 12.

²⁴ Nat'l Wildlife Fed'n, 2011 WL 3322793, at *1.

 $^{^{25}}$ Id. at *6.

²⁶ Id.

²⁷ Id. at *8.

²⁸ Id.

²⁹ Id. at *5.

³⁰ *Id.* at *1.

³¹ Id. at *4 (citing 5 U.S.C. § 706(2)(A) (2006)).

³² *Id.* at *6 (quoting 50 C.F.R. § 402.02 (2010)) (internal quotation marks omitted) (citing *Nat'l Wildlife Fed'n I*, 254 F. Supp. 2d 1196, 1207–09 (D. Or. 2003)).

"failed to adequately identify specific and verifiable mitigation plans beyond 2013" and was therefore arbitrary and capricious.³³

Mitigation measures, Judge Redden wrote, must be "reasonably specific, certain to occur, and capable of implementation; they must be subject to deadlines or otherwise-enforceable obligations." NOAA Fisheries, he concluded, had not cleared this bar. Judge Redden compared the biological opinion's RPAs to those ruled deficient in *Center for Biological Diversity v. Rumsfeld*, in which the Army's planned measures to avoid harming endangered bird habitat near a base were "vague, entirely voluntary," and "subject to substantial uncertainty." Although the defendants "need not articulate every detail of a habitat mitigation plan," Judge Redden stated, "[t]hey must do more than they have here." Furthermore, in light of the defendants' track record, there was "no indication that they will be able to identify and implement the actions necessary to catch up." 38

Nevertheless, Judge Redden ordered that the biological opinion stay in place through 2013 and directed NOAA Fisheries to produce a new or supplemental biological opinion by January 1, 2014.³⁹ Vacating the biological opinion, he said, would eliminate important salmon protections and be "disastrous."⁴⁰ The 2014 deadline would allow NOAA Fisheries to "'get out of the courtroom' and get to work."⁴¹

Notwithstanding this reprieve, Judge Redden signed off with stern words, calling "the lack of scientific support for NOAA Fisheries' specific survival predictions . . . troubling."⁴² He criticized the 2004 biological opinion as well, calling it "a cynical and transparent attempt to avoid responsibility" for the salmon's decline.⁴³ In light of the defendants' "history of abruptly changing course . . . and failing to follow through with their commitments," the court retained jurisdiction and ordered defendants to file annual implementation reports.⁴⁴

The decision has, not surprisingly, prompted sharply differing reactions. The Chair of the House Natural Resources Committee, Representative Doc Hastings of Washington, condemned the judge's "extremely alarming and unacceptable statements" — a far cry from the

³³ Id

 $^{^{34}}$ Id. (quoting Ctr. for Biological Diversity v. Rumsfeld, 198 F. Supp. 2d 1139, 1152 (D. Ariz. 2002)) (internal quotation mark omitted).

^{35 198} F. Supp. 2d 1139.

³⁶ *Id.* at 1144, 1145.

³⁷ Nat'l Wildlife Fed'n, 2011 WL 3322793, at *9.

³⁸ Id. at *8.

³⁹ *Id.* at *12.

⁴⁰ *Id.* at *10.

⁴¹ *Id*.

⁴² *Id*.

⁴³ *Id.* at *11.

⁴⁴ *Id*.

"delighted" response of one of the plaintiffs' attorneys. Will Stelle, NOAA Fisheries' Northwest Regional Administrator, called the decision "fundamentally encouraging" despite the remand. Yet the decision is neither as alarming as dam supporters fear nor as unequivocally favorable as conservation groups might hope. Instead it treads carefully through a regional minefield and emerges with a compromise, criticizing the agencies but acknowledging the practical constraints they face. Although agency discretion and other issues are left for the next court challenge, this decision is a deft balancing act.

Given the shortcomings of the biological opinion, Judge Redden had little choice but to hold its proposed RPAs inadequate. Reasonably certain projects "require[] 'specific and binding plans' including a 'clear, definite commitment of resources.'"47 Courts have invalidated biological opinions because the mitigation measures they identify in RPAs are too voluntary to be reasonably certain to occur;⁴⁸ vet the 2008 opinion does not identify with specificity even voluntary projects after 2013. The biological opinion's flaws extend beyond its vagueness, however. By allowing any unattained salmon survival improvements to be made up in future years,49 it all but guarantees that improvements will not be fully achieved. It then concludes that "[t]he 2016 Plan will identify steps the Action Agencies will take to ensure that projects needed to cover any remaining estuary survival deficits will be funded by 2017."50 An adaptive approach to species protection has its benefits,⁵¹ but flexibility does not excuse incompleteness. Faced with a plan that not only fails to identify projects after 2013 but also assumes that the unidentified projects will make up for any flaws in the identified projects, Judge Redden reasonably deemed the mitigation insufficiently certain to occur. Considering the action agencies'

⁴⁵ Scott Learn, Federal Judge Shoots Down Plan for Columbia River Basin Dams and Salmon for Third Time, OREGONIAN, Aug. 3, 2011, http://www.oregonlive.com/environment/index.ssf/2011/08/judge_james_redden_shoots_down.html (internal quotation marks omitted).

⁴⁶ Jeff Barnard et al., *Judge Rejects Salmon-Protection Plan as Too Vague*, SEATTLE TIMES, Aug. 2, 2011, http://seattletimes.nwsource.com/html/localnews/2015801139_salmondamso3m.html.

⁴⁷ S. Yuba River Citizens League v. Nat'l Marine Fisheries Serv., 723 F. Supp. 2d 1247, 1277 (E.D. Cal. 2010) (quoting Nat'l Wildlife Fed'n III, 524 F.3d 917, 936 (9th Cir. 2008)).

⁴⁸ See, e.g., Fla. Key Deer v. Brown, 364 F. Supp. 2d 1345, 1355–56 (S.D. Fla. 2005) (holding that agencies unlawfully relied on voluntary measures to mitigate impacts of National Flood Insurance Program); Ctr. for Biological Diversity v. Rumsfeld, 198 F. Supp. 2d 1139, 1153 (D. Ariz. 2002) (invalidating a biological opinion because "the mitigation measures . . . are merely suggestions").

⁴⁹ NOAA FISHERIES, *supra* note 12, Reasonable and Prudent Alternative Table at 48 ("The remaining survival improvements needed to be met in each cycle will be determined based on the estuarry survival benefits achieved . . . in the previous cycle.").

⁵¹ See J.B. Ruhl, Taking Adaptive Management Seriously: A Case Study of the Endangered Species Act, 52 U. KAN. L. REV. 1249, 1269 (2004) (criticizing the ESA consultation process as "classically 'front-end' in approach").

historically patchy implementation — not to mention current federal budget conditions⁵² — Judge Redden's decision was not just reasonable but also required.

Moreover, the court's pointed criticism may spur the agencies to take seriously options that scholars and advocates have been urging for decades.⁵³ In its remand, the court ordered NOAA Fisheries to "consider[] whether more aggressive action, such as dam removal and/or additional flow augmentation and reservoir modifications are necessary to avoid jeopardy."⁵⁴ Without expressly requiring that they remove dams, the court's ruling leaves agencies with little doubt about the most straightforward path to withstanding challenge in 2014.

But although Judge Redden rightly rejected the biological opinion as inadequate, and strongly reprimanded the agencies, his reasoning and his remedy reveal considerable judicial restraint. By confining his decision to the likelihood of the mitigation measures, Judge Redden was able to assume the validity of the NOAA Fisheries' jeopardy framework — its definition of what survival rates constitute jeopardy and to what extent the agency must plan for species recovery — and its scientific findings, both of which the plaintiffs had challenged.55 Both these issues touch on the flashpoint of dam removal. The extent to which the framework emphasizes recovery, in addition to mere survival, and the quality of the science behind habitat mitigation measures both affect the likelihood that alternatives to dam removal could ever pass ESA muster.⁵⁶ Deciding on "reasonable certainty" grounds also let the court impose a moderate remedy: leaving the biological opinion in place until 2014. Thus designed, the decision avoids an unnecessarily broad and contentious ruling — but it also leaves open major issues and makes another round of litigation all but certain.

The decision gives the agencies a choice: issue a beefed-up but largely similar biological opinion and risk a fourth remand; or take the court's hint, seriously consider dam removal or flow increases, and risk

⁵² Lack of funding can be a factor in finding mitigation measures not reasonably certain. *See* Ctr. for Biological Diversity v. Salazar, No. CV-07-484-TUC-AWT, 2011 WL 2160254, at *12 (D. Ariz. May 28, 2011).

⁵³ See generally, e.g., Michael C. Blumm et al., Saving Snake River Water and Salmon Simultaneously: The Biological, Economic, and Legal Case for Breaching the Lower Snake River Dams, Lowering John Day Reservoir, and Restoring Natural River Flows, 28 ENVTL. L. 997 (1998).

⁵⁴ Nat'l Wildlife Fed'n, 2011 WL 3322793, at *10.

⁵⁵ See id. at *5–6. The court took a similar approach in both 2003 and 2005, declining to decide the validity of NOAA Fisheries' science. See Nat'l Wildlife Fed'n II, No. CV 01-640-RE, CV 05-23-RE, 2005 WL 1278878, at *22 (D. Or. May 26, 2005); Nat'l Wildlife Fed'n I, 254 F. Supp. 2d. 1196, 1205 (D. Or. 2003).

 $^{^{56}}$ Judge Redden did rule on — and reject — NOAA Fisheries' jeopardy framework in 2005, holding that the agency's failure to address recovery in addition to survival was contrary to law. Nat'l Wildlife Fed'n II, 2005 WL 1278878, at *17, aff'd, 524 F.3d 917, 931–32 (9th Cir. 2008).

a challenge from dam supporters.⁵⁷ Just one of many potential issues in such a challenge is the extent of agency discretion. Agencies need to consult with NOAA Fisheries (or the U.S. Fish and Wildlife Service, for some species) only when they have "discretionary Federal involvement or control" over the action.⁵⁸ If a future biological opinion called for dam removal, parties could argue that the existence of the dams is nondiscretionary and outside the scope of consultation.

The administration's adaptive management plan indicates that the agencies would seek congressional authorization for removing any dams,⁵⁹ but even if this authorization were not forthcoming, it is plausible that ordering substantial flow increases or limited dam removal could be within agency discretion for two reasons. First, the case in which the Supreme Court upheld the exemption of nondiscretionary actions, National Ass'n of Home Builders v. Defenders of Wildlife,60 involved a much clearer statutory conflict with the ESA. There, the Court held that, when Arizona had met all of the Clean Water Act criteria for taking over pollution-permitting authority from the Environmental Protection Agency (EPA), EPA could not condition that transfer on ESA consultation because the transfer was nondiscretionary.61 Decisions finding agency actions nondiscretionary have typically involved similar permitting and approval actions.⁶² By contrast, federal dam operations are "highly complex" both legally and scientifically;63 "operating a large, multi-purpose federal water project is about as discretionary as it gets."64 Shortly after Home Builders, the Ninth Circuit rejected the argument that FCRPS dam operations are nondiscretionary, stating that "Congress has imposed broad mandates which do not

⁵⁷ Even before the decision, there were signs that agencies were beginning to contemplate dam removal. The government's 2009 implementation plan resurrected a Clinton-era provision that listed breaching one or more dams on the Lower Snake River as a last-resort option. *See* NOAA FISHERIES, FCRPS ADAPTIVE MANAGEMENT IMPLEMENTATION PLAN 36–39 (2009).

⁵⁸ 50 C.F.R. § 402.03 (2010). The ESA does not mention discretion, merely stating that federal agencies must "insure that any action authorized, funded, or carried out by such agency" must not jeopardize endangered species. 16 U.S.C. § 1536(a)(2) (2006). For a critical view of the discretionary exemption, see Jan Hasselman, Holes in the Endangered Species Act Safety Net: The Role of Agency "Discretion" in Section 7 Consultation, 25 STAN. ENVTL. L.J. 125 (2006).

⁵⁹ NOAA FISHERIES, *supra* note 57, at 37.

^{60 127} S. Ct. 2518 (2007).

⁶¹ Id. at 2537-38.

⁶² See, e.g., Envtl. Prot. Info. Ctr. v. Simpson Timber Co., 255 F.3d 1073, 1083 (9th Cir. 2001) (finding that agency did not retain discretionary control after approving timber company's incidental take permit); Sierra Club v. Babbitt, 65 F.3d 1502, 1509 (9th Cir. 1995) (finding that agency's logging road authorization was nondiscretionary). But see Wash. Toxics Coal. v. EPA, 413 F.3d 1024, 1033 (9th Cir. 2005) (ordering EPA to undergo ESA consultation after registering pesticide because it had "ongoing discretion" to alter or cancel pesticide registrations).

⁶³ Reed D. Benson, Dams, Duties, and Discretion: Bureau of Reclamation Water Project Operations and the Endangered Species Act, 33 COLUM. J. ENVIL. L. 1, 41 (2008).

⁶⁴ Id. at 42.

direct agencies to perform any specific nondiscretionary actions, but rather, are better characterized as directing the agencies to achieve particular goals."⁶⁵ Although it is a closer question whether the decision to keep the dams running at all is discretionary, the Ninth Circuit has clearly distinguished laws governing dam management from the cut-and-dried mandates deemed nondiscretionary. Even if the FCRPS agencies lack the discretion to take down all the dams, removing at least a few could be within their authority.

Second, Congress's clear desire to protect endangered species, and salmon in particular, empowers the agencies to combat the existential threat dams pose to salmon. Courts have consistently recognized the high value Congress placed on species protection in enacting the ESA.⁶⁶ More importantly for the Columbia River, the 1980 Pacific Northwest Electric Power Planning and Conservation Act⁶⁷ (Northwest Power Act) explicitly acknowledged the regional and national importance of salmon and established fish and wildlife protection and enhancement as a priority on the river.⁶⁸ It does not simply emphasize cheap hydropower and irrigation; it imposes a dual mandate of conservation and power generation on the agencies.⁶⁹ These statutes together strongly demonstrate congressional intent to protect salmon and suggest that agencies would have the discretion to moderately reduce consumption of one resource to save the other from extinction.

Neither the agencies nor the courts can put off resolving the salmon's fate forever; they risk letting it become "the first ESA-protected species to be studied to death." In spite of the issues it leaves unresolved, however, the court's decision is the best possible outcome for now. Leaving the biological opinion in place temporarily may better protect the salmon in the short term by letting the agencies implement their plan, imperfect as it is. The court's remand thus sets up tough questions for the future, but in the meantime the waters are calm.

⁶⁵ Nat'l Wildlife Fed'n III, 524 F.3d 917, 928 (9th Cir. 2008) (distinguishing Home Builders); cf. Benson, supra note 63, at 40–51 (arguing that ESA consultation should still apply to Bureau of Reclamation dams after Home Builders).

⁶⁶ See, e.g., Tenn. Valley Auth. v. Hill, 437 U.S. 153, 174 (1978) ("Congress intended endangered species to be afforded the highest of priorities."); Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 426 F.3d 1082, 1084–85 (9th Cir. 2005) (quoting Hill, 437 U.S. at 185); Sierra Club v. Marsh, 816 F.2d 1376, 1383 (9th Cir. 1987) ("[T]he balance has been struck in favor of . . . endangered species" (quoting Hill, 437 U.S. at 194)).

^{67 16} U.S.C. §§ 839–839h (2006).

⁶⁸ See id. § 839(6).

⁶⁹ See H.R. REP. No. 96-976, pt. 1, at 49 (1980) ("[I]t is the intention of the Committee to treat fish and wildlife as a co-equal partner with other uses"); see also Nat'l Wildlife Fed'n III, 524 F.3d at 931 ("[T]he operation of the dams is within the federal agencies' discretion under both the ESA and the Northwest Power Act"). See generally BLUMM, supra note 5, at 129-60 (discussing the "parity" promised by the Northwest Power Act).

⁷⁰ Blumm & Corbin, supra note 10, at 604 (referring to the Snake River salmon).