

BOOK REVIEW

THE REAL STORY BEHIND THE COLUMBIA BASIN SALMON DEBACLE: DAM PRESERVATION UNDER THE ENDANGERED SPECIES ACT

BY

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This review of Steven Hawley's provocative book, Recovering a Lost River: Removing Dams, Rewilding Salmon, Revitalizing Communities, examines Hawley's claim that the best way to recover endangered Snake River salmon is by removing the four Lower Snake River dams. These dams, managed by the United States Army Corps of Engineers, impede access to more than 5300 miles of prime salmon habitat and operate with enormous public subsidies, largely to maintain a seaport 465 miles inland at Lewiston, Idaho. Hawley's book shows not only that additional public subsidies in the form of river dredging and new levees will be necessary to maintain the port, but also that local residents are beginning to question the sustainability of relying on the port for their economic future. The book explains how Endangered Species Act procedures have resulted in only minor changes to dam operations and discusses the benefits of a restored Snake River by examining salmon runs in undammed Alaska as well as in California and Maine, where dams have been removed. Although the removal of the Lower Snake Dams faces long political odds, Hawley's book is a reminder that both economically and ecologically it is the best means of restoring Snake River salmon, which has been federal and regional policy for more than three decades.

The salmon wars in the Columbia Basin have been ongoing for decades.¹ Astonishingly, since the Northwest Power Act² ordered salmon and hydropower to be coequals in 1980,³ Columbia Basin salmon runs have declined to about one-half of what they were thirty years ago, despite the expenditure of more than \$600 million annually, nearly \$10 billion cumulatively.⁴ Worse, the listing of Columbia salmon under the Endangered Species Act (ESA)⁵ twenty years ago has not only failed to restore wild salmon runs, but also apparently lowered the policy bar from restoring healthy runs to merely preventing their extinction.⁶

This sorry saga is the subject of Steven Hawley's engrossing book, *Recovering a Lost River: Removing Dams, Rewilding Salmon, Revitalizing Communities*.⁷ The startling expenses and miserable results are, according to Hawley, the result of "a skillfully directed symphony of public-relations scams, filthy politics, and crooked science."⁸ The book backs up this allegation through a number of interviews with veterans of the salmon wars and a careful perusal of relevant government reports. Included are depictions of an attempt to defund the only independent source of salmon science,⁹ the purchase of scientists who tell federal water agencies what they want to hear,¹⁰ and the co-option of a federal agency, the National Marine

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¹ See generally MICHAEL C. BLUMM, *SACRIFICING THE SALMON: A LEGAL AND POLICY HISTORY OF THE DECLINE OF COLUMBIA BASIN SALMON* (2002) (discussing the history of salmon law, policy, and conflict in the Columbia Basin).

² Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. §§ 839–839h (2006).

³ See *id.* § 839; STEVEN HAWLEY, *RECOVERING A LOST RIVER: REMOVING DAMS, REWILDING SALMON, REVITALIZING COMMUNITIES* 84 (2011). See also BLUMM, *supra* note 1, at 129, 133, 136.

⁴ HAWLEY, *supra* note 3, at 129, 138. Some statistics reveal an even more alarming picture. For example, there were roughly 2 million wild Snake River salmon historically; wild runs are now at about one percent of that number. *Id.* at 130.

⁵ Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2006 & Supp. IV 2011).

⁶ HAWLEY, *supra* note 3, at 139 (quoting Ed Chaney).

⁷ See generally *id.*

⁸ *Id.* at 144.

⁹ *Id.* at 141–44. These efforts were rejected by the Ninth Circuit in *Northwest Environmental Defense Center v. Bonneville Power Administration*, 477 F.3d 668, 677, 691 (9th Cir. 2007). The court determined that the remarks of Sen. Larry Craig (R-Idaho) accompanying an appropriations statute, which called for defunding the Fish Passage Center, established by the Northwest Power and Conservation Council under the Northwest Power Act, were not enforceable. 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, 57–65 (2008); see also HAWLEY, *supra* note 3, at 149–50 (discussing the Bonneville Power Administration's defunding of a multi-agency salmon science project known as the Plan for Analyzing and Testing Hypotheses (PATH) because it concluded that the action most likely to recover listed Snake River salmon was breaching the Lower Snake River dams); Michael C. Blumm & Greg D. Corbin, *Salmon and the Endangered Species Act: Lessons from the Columbia Basin*, 74 WASH. L. REV. 519, 557–58 (1999) (discussing the short-lived PATH study).

¹⁰ HAWLEY, *supra* note 3, at 147–58 (discussing the BPA-funded work of Dr. David Welch of Kintama Research in British Columbia, Dr. James Anderson, an assistant professor at the University of Washington, and Rich Zable, a former student of Anderson's now at the National Oceanic and Atmospheric Administration (NOAA)).

Fisheries Service (NMFS)—once a salmon advocate—by power and water agencies like the Bonneville Power Administration (BPA) and the United States Army Corps of Engineers (Corps), which seek to preserve dams and current hydropower operations.¹¹

The Obama Administration, whose call for use of unbiased science might have signaled a reversal of decades of failure, has instead chartered a status quo course, attempting to avoid major changes to the dams and their operations by promising to offset the harm they inflict on salmon populations by rehabilitating salmon habitat elsewhere in the basin.¹² This “bait and switch” approach to salmon recovery has repeatedly failed to convince a federal judge that it was consistent with the ESA.¹³

According to Hawley, the somewhat surprising conversion of the Obama Administration to maintain the status quo was the result of the work of a cabal of Washington state politicians, including Secretary of Commerce Gary Locke, Senators Patty Murray and Maria Cantwell, and Governor Christine Gregoire, who accepted a \$40.5 million check from BPA to realign

¹¹ *Id.* at 160 (noting that three-quarters of NOAA’s budget—over \$90 million annually—comes from BPA and the Corps); *see also* Blumm & Corbin, *supra* note 9, at 591–93 (discussing the evolution of NMFS—a NOAA sub-agency—from salmon advocate to dam apologist).

¹² HAWLEY, *supra* note 3, at 161–67 (discussing the President’s promise to “restore science to its rightful place,” and the ironic ensuing conversion of his NOAA Administrator, Dr. Jane Lubchenco from Oregon State University, to support Lower Snake Dam preservation); *see also* Michael Blumm, *Obama Disappoints When It Comes to Salmon*, HIGH COUNTRY NEWS, Oct. 13, 2009, <http://www.hcn.org/wotr/obama-disappoints-when-it-comes-to-salmon> (last visited Nov. 12, 2011).

¹³ *See* HAWLEY, *supra* note 3, at 153; *see also* 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, 763–806 (2006) (discussing the ESA salmon litigation); Blumm & Putnam, *supra* note 9, at 50–57 (discussing Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., 481 F.3d 1224 (9th Cir. 2007) (affirming the district court) and its decision to strike a flawed biological opinion).

Right before this review went to press, Judge James Redden struck down the latest federal attempt to make existing hydrosystem operations compliant with the ESA. Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., No. CV 01-00640-RE, 2011 WL 3322793 (D. Or. Aug. 2, 2011) (ruling that the federal biological opinion (BiOp) required by the ESA was inadequate because most of the mitigation measures it promised over a 10-year period were not reasonably certain to occur and ordering a new BiOp to govern river operations after 2013). The new BiOp ordered by Judge Redden must “reevaluate[] the efficacy of . . . [mitigation measures], identif[y] reasonably specific mitigation plans for the life of the [plan], and consider[] whether more aggressive actions such as dam removal and/or additional flow augmentation and reservoir modifications are necessary to avoid jeopardy” to dwindling wild salmon populations. *Id.* at *10.

Judge Redden was quite critical of the science that underlined the government’s BiOp, noting that “the lack of scientific support for [its] survival predictions is troubling” and concluding that there was no basis to believe that “expected habitat improvements—let alone the expected survival increases—are likely to materialize.” *Id.* at *6 n.3, *8. The judge observed that even the government’s own scientists “expressed skepticism about whether [salmon survival] benefits will be realized.” *Id.* at *10. The judge therefore concluded that “[c]oupled with the significant uncertainty surrounding the reliability of [the government’s] habitat methodologies, the evidence that habitat actions are falling behind schedule, and that benefits are not accruing as promised, [the government’s] approach to these issues is neither cautious nor rational.” *Id.* at *9.

the state's position in the ESA lawsuit.¹⁴ These politicians have become status quo defenders through the efforts of lobbying groups like the Pacific Northwest Waterways Association and Northwest River Partners, coalitions of ports, utilities, and businesses wedded to the current system of dam operations.¹⁵ Hawley alleges that non-scientists like Jeff Stier (at BPA) and Bob Lohn (at several agencies) rewrote scientific findings to coincide with their agencies' positions that the status quo was sufficient to satisfy federal law.¹⁶

In addition to manipulating the science of salmon recovery, the federal agencies controlling the Columbia hydrosystem have misappropriated the economics. As Hawley points out, one of the basic premises of the Northwest Power Act was that the conservation measures it authorized would redound to the benefit of fish and wildlife, especially the salmon runs.¹⁷ The Act not only aimed to put fish and wildlife and hydroelectric generation on an equal footing,¹⁸ it promised "equitable treatment" for fish and wildlife from federal water managers.¹⁹ One would have thought that, at a minimum, these promises would have produced changes in the way the hydrosystem operates to provide river flows and spills to facilitate salmon migration as more than 3600 megawatts of new conservation measures came on line.²⁰ But the federal water managers have never offered those changes; the only significant operational changes that have occurred have been the summer spills ordered by federal district judge James Redden.²¹

For Hawley and for several salmon war veterans he interviewed, like Reed Burkholder and Ed Chaney,²² the obvious solution to significantly restoring the salmon runs is to remove the four federal dams on the Lower Snake River. Some studies suggest this solution not only is economically

¹⁴ HAWLEY, *supra* note 3, at 163–67. There is little doubt that this political alliance was orchestrated by BPA. *See id.* at 167 (discussing comments of BPA Administrator Steve Wright).

¹⁵ *Id.* at 75.

¹⁶ *See id.* at 152–58, 168 (describing Lohn's relationship with science and his participation in the creation of the Salmon Recovery Division); *id.* at 158–60 (describing Stier's participation in shaping the policies of BPA as its senior policy advisor for Fish and Wildlife).

¹⁷ *Id.* at 87.

¹⁸ *Id.* at 84; *see also* *Nw. Res. Info. Ctr., Inc. v. Nw. Power Planning Council*, 35 F.3d 1371, 1377 (9th Cir. 1994).

¹⁹ Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. § 839b(h)(11)(A)(ii) (2006).

²⁰ HAWLEY, *supra* note 3, at 87.

²¹ *See id.* at 143. According to the Fish Passage Center, a spill is the "next best thing to a free-flowing river." *Id.* at 142 (noting that spills have been court-ordered since 2005); *see also* Blumm, Thorson & Smith, *supra* note 13, at 794–806 (discussing Judge Redden's first spill injunction). Judge Redden continued his spill injunction in his 2011 decision. *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, No. CV-01-00640-RE, 2011 WL 3322793, at *12 (D. Or. Aug. 2, 2011); *see also id.* at *11 (discussing the need for an injunction by describing the federal government's "fail[ure] to follow through with their commitments to hydropower modifications proven to increase survival (such as spill)").

²² HAWLEY, *supra* note 3, at 73–81, 87–89 (describing Burkholder's views on the negative environmental consequences of the dams on the Snake River); *id.* at 123–40 (describing Chaney's view that the adherence to the status quo by federal agencies, combined with ineffective mitigation measures, has exacerbated the plight of salmon along the Snake River).

affordable, but also actually might end up saving money by eliminating the need to maintain the dams and for costly mitigation measures like barging salmon and hatcheries, which only serve to damage wild salmon.²³ However economically and scientifically supportable dam removal may be,²⁴ it would require an unlikely political transformation. The book suggests that the beginning of such a transformation may be evident in Lewiston, Idaho, the seaport the dams created, some 465 miles inland.²⁵

One of the great contributions of Hawley's book is a consequence of a trip to Lewiston where he interviews several individuals interested in the condition of the Snake River. For he shows that, contrary to legend, not everyone in Lewiston is happy with the status quo. The city, located at the confluence of the Snake and Clearwater Rivers, faces a flood threat due to massive siltation of the Snake accumulating behind Lower Granite Dam, twenty miles downriver.²⁶ The Corps has constructed levees to protect the city from flooding, but with more than a million cubic yards of silt accumulating per year,²⁷ the levees are not adequate to protect the city from even a ten-year flood.²⁸ Raising the levees would cost \$95 million, but most residents oppose this option because it would destroy a popular greenway.²⁹ Dredging the silt could cost up to \$36 million annually.³⁰ All this to save an inland port that employs no more than twenty-five people, and whose

²³ *Id.* at 118–19 (claiming that maintaining the Lower Snake Dams costs the federal government \$250 million annually); *id.* at 121, 126–29 (describing the ineffectiveness of barging salmon past the dams); *id.* at 129–32 (noting that in 2005 there were 134 million hatchery fish released from more than 200 facilities in the Columbia Basin, that three-quarters of the salmon in the basin are now hatchery fish, and citing a National Research Council study that called for the dismantling of hatcheries that interfere with “a [non-existent] comprehensive rehabilitation strategy” (quoting NAT'L RESEARCH COUNCIL, UPSTREAM: SALMON AND SOCIETY IN THE PACIFIC NORTHWEST 321–22 (1996), available at <http://www.nap.edu/openbook.php?isbn=0309053250>)).

²⁴ *Id.* at 132–34 (discussing a 1999 Corps study concluding that breaching the Lower Snake Dams would impose a net economic cost of \$246 million per year, but considering the value of restored salmon runs to be a surely underestimated \$82 million and ignoring that 1) when the dams were constructed they returned only 15 cents on the federal dollar, and 2) the cost of bringing the operation of the dams into compliance with the Clean Water Act is, according to the Environmental Protection Agency, between \$460 million and \$900 million per year). The Corps's own recreation planner, Phil Benge, along with Colorado State University economist, Dr. John Loomis, estimated the benefits of a free-flowing Lower Snake River at \$142 million to \$508 million per year. *Id.* at 133; see also 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, 1023–31 (1998) (citing numerous studies).

²⁵ See HAWLEY, *supra* note 3, at 107.

²⁶ *Id.* at 101.

²⁷ *Id.* at 101–03; see *id.* at 104 (noting that “merely keeping pace with the annual deposit would require about fifty thousand standard-size dump-truck loads a year”).

²⁸ *Id.* at 103; see *id.* at 104 (noting that the Corps has no authority to implement soil conservation measures that might reduce siltation); *id.* at 114–15 (observing that the city cannot obtain from the Corps an emergency flood plan).

²⁹ *Id.* at 104–05; see also *id.* at 120 (estimating local opposition to raising the levees at 90%).

³⁰ *Id.* at 103. Moreover, the Corps has no authority to dredge the silt accumulating at the mouth of the Snake and Clearwater Rivers, which is Lewiston's problem, since the agency has authority only to dredge in the navigation channel below Lower Granite Dam. *Id.* at 109.

operation requires an annual local subsidy in the form of a “temporary” tax now in its fifty-third year.³¹ The Corps’s promise that the port would be self-financing has never been fulfilled. Some of the locals believe that the only economically sound way out of this Byzantine mess of federal subsidies (and accompanying federal control) is to forsake the dredging and the levees and return the river to its natural state.³² Returning to a natural river would enable Lewiston to become the gateway to a recreational mecca in northern Idaho that would attract salmon fishers (and, no doubt, businesses) from all over the world.³³

The book adds useful context to the Lower Snake Dam removal argument by discussing some relevant history, including the removal of the Sunbeam Dam on the Yankee Fork of the Salmon River (tributary to the Snake) in 1934 by surreptitious means³⁴ and the blocking of the High Mountain Sheep Dam in the 1960s which, with an important assist from the United States Supreme Court,³⁵ saved northern Idaho’s salmon runs.³⁶ Hawley also contrasts the endangered status of Columbia Basin salmon with the abundance of salmon in Alaska, which has refused both dams and the accompanying salmon hatcheries.³⁷

Hawley discusses at length several significant ancillary issues, including 1) the critical importance of Columbia Basin chinook salmon to the diet of endangered killer whales residing in Puget Sound,³⁸ 2) the virtues of dam removal to salmon restoration in Butte Creek in northern California,³⁹ and 3) the remarkable ecosystem recovery that took place after the removal of the Edwards Dam on the Kennebec River in 1999.⁴⁰ All of these vignettes add weight to the argument for removal of the Lower Snake Dams.⁴¹

This is a powerful, yet immensely readable book that brings together a good deal of information never collected before in one volume.⁴² Hawley

³¹ *Id.* at 107.

³² *See id.* at 105–08, 117–22 (noting the views of lifelong Lewiston residents, Jim Kluss and Dustin Aherin). The port manager, David Doeringsfeld, predictably does not agree. *Id.* at 108–11.

³³ *Id.* at 133 (estimating the recreational benefits of a restored Snake River at \$70 million to \$416 million per year); *see also id.* at 119–20 (suggesting that a model for Lewiston could be Missoula, Montana, whose recreation-based economy has attracted many residents).

³⁴ *Id.* at 1–5.

³⁵ Michael C. Blumm, *Saving Idaho’s Salmon: A History of Failure and a Dubious Future*, 28 IDAHO L. REV. 667, 675–77 (1992) (discussing *Udall v. Fed. Power Comm’n*, 387 U.S. 428 (1967)).

³⁶ *See* HAWLEY, *supra* note 3, at 93–98.

³⁷ *Id.* at 13–30.

³⁸ *Id.* at 31–51.

³⁹ *Id.* at 53–71.

⁴⁰ *Id.* at 171–86.

⁴¹ So does the fact that the Lower Snake Dams impede access to 5500 miles of prime salmon habitat, fully one-half of the habitat in the Columbia Basin. *Id.* at 145.

⁴² One weakness of the book is its advocacy of a salmon summit to resolve outstanding issues. *See id.* at 121–22. This vehicle has been tried and found wanting in the early 1990s. *See* Michael C. Blumm & Andy Simrin, *The Unraveling of the Parity Promise: Hydropower, Salmon, and Endangered Species in the Columbia Basin*, 21 ENVTL. L. 657, 725–27 (1991) (noting that there is no reason to believe that another summit involving all “stakeholders” would materially improve federal hydroelectric operations for salmon, given the overwhelming organizational skills of BPA and its allies).

manages, in an accessible and often amusing way,⁴³ to make the immense tragedy of the decline of Columbia Basin salmon hit home to his readers. The book might rekindle interest in the removal of the uneconomical and environmentally disastrous Lower Snake Dams,⁴⁴ once the subject of serious consideration in the 1990s.⁴⁵ If so, Hawley's vivid and provocative account will help keep the promise of a restored, free-flowing Snake River alive, a significant contribution to wild salmon and those who care about them.⁴⁶

⁴³ For example, chapter eight of the book is entitled "The Fifth H," adding to the traditional four "Hs" of hydro, hatcheries, habitat, and harvest an additional "H"—horseshit. HAWLEY, *supra* note 3, at 125–26 (adopting Ed Chaney's description of the BPA/Corps salmon program built on barging and hatcheries).

⁴⁴ Hawley makes clear that the claim that the Lower Snake dams produce "clean energy" is a shibboleth, as clean energy does not directly threaten species extinction, something not even coal plants do. *Id.* at 87. Reed Burkholder, mentioned *supra* note 22 and accompanying text, referred to the Lower Snake Dams as the equivalent of a "140-mile-long strip mine." *Id.*

⁴⁵ See generally Blumm et al., *supra* note 24 (compiling and discussing the major studies, which show the scientific and economic soundness of breaching the Lower Snake dams).

⁴⁶ The best source of current information on the campaign to remove the Lower Snake Dams is the website of Save Our Wild Salmon. Save Our Wild Salmon, *Homepage*, <http://www.wildsalmon.org/> (last visited Nov. 12, 2011). The site reported that on June 27, 2011, the Western Division of the American Fisheries Society voted overwhelmingly in support of a resolution stating that the four Lower Snake Dams constituted a significant threat to the continued existence of wild Snake River salmon. Press Release, Western Division of American Fisheries Society Deems the Four Lower Snake River Dams a Threat to Wild Salmon and Steelhead Survival (June 27, 2011) http://www.wildsalmon.org/index.php?option=com_content&view=article&id=384:western-division-of-american-fisheries-society-deems-the-four-lower-snake-river-dams-a-threat-to-wild-salmon-and-steelhead-survival&catid=37:press-releases&Itemid=90 (last visited Nov. 12, 2011); W. DIV., AM. FISHERIES SOC'Y, RESOLUTION OF THE WESTERN DIVISION OF THE AMERICAN FISHERIES SOCIETY ON THE ROLE OF DAMS AND CONSERVATION OF SNAKE RIVER SALMON, STEELHEAD, PACIFIC LAMPREY, AND STURGEON 1–3 (2011), *available at* http://www.wdafs.org/committees/env_concerns/2011/Western_Division_AFS_Snake_River_Resolution_2011_Final.pdf.