Endangered Species Act Issues Regarding Columbia Basin Salmon and Steelhead

-name redacted-
Legislative Attorney

-name redacted-
Analyst in Natural Resources Policy

January 2, 2013

Congressional Research Service
7-....
www.crs.gov
R40169

CRS Report for Congress
Prepared for Members and Committees of Congress

Summary

Salmon and steelhead populations in the Columbia Basin have declined since commercial fishing began in the late 1800s, and declined further since the construction and operation of the Federal Columbia River Power System (FCRPS) in the mid-1900s. In 1991, the Snake River sockeye became the first Pacific salmon stock determined to be endangered under the Endangered Species Act (ESA). Since then, FCRPS operations have to be reviewed for their impact on ESA listed species. This means that federal operators of the FCRPS—the Bureau of Reclamation (Reclamation), the Bonneville Power Administration (BPA), and the Army Corps of Engineers (Corps)—are required to consult with the National Marine Fisheries Service (NMFS) of the Department of Commerce on how their actions may impact listed species. At the end of the consultation, NMFS issues a biological opinion (BiOp) as to whether the action would jeopardize the continued existence of a listed species or damage its critical habitat. As part of the consultation process, NMFS recommends mitigation measures to avoid harm. Protective measures for fish often come at a cost in terms of energy generation or irrigation supply, and this tension between natural resources and energy production and irrigation is at the heart of conflict in the Columbia Basin.

Beginning in 1992, a series of BiOps were issued by NMFS. Courts have found almost all of them inconsistent with the ESA. The most recent BiOp was a 2010 supplement to the May 2008 BiOp, produced after the 2005 BiOp was remanded by a court for being arbitrary and capricious. In August 2011, that 2010 supplemental BiOp was also found insufficient by a federal court, and the temporary measures put in place in 2005 continue to dictate FCRPS operation.

In the meantime, NMFS authorized Washington and Oregon to kill sea lions that gather seasonally below the Bonneville Dam to eat salmon, steelhead, and sturgeon. The authorization was revoked in November 2010, following a Ninth Circuit decision that the permit to kill was contrary to law. The court found that NMFS could not justify killing sea lions when the sea lions' take of the salmon was shown to be no larger than that of commercial fishing, which the court found had not been curtailed. In May 2011, NMFS authorized states to kill up to 85 sea lions, but withdrew that authorization in July 2011. In March 2012, NMFS authorized Washington, Oregon, and Idaho to kill or remove up to 92 animals annually through May 2016.

Since the first listing, steps have been taken to improve salmon and steelhead habitat. In a major action, removal of Condit Dam on the White Salmon River, a Columbia River tributary above Bonneville Dam, began with initial breaching on October 26, 2011. Upon completion, dam removal is expected to reopen 33 miles of habitat to steelhead trout and 14 miles of habitat to salmon. In addition, BPA continually modifies dams and associated structures to better facilitate upstream and downstream fish passage.

Contents

Figures

Tables

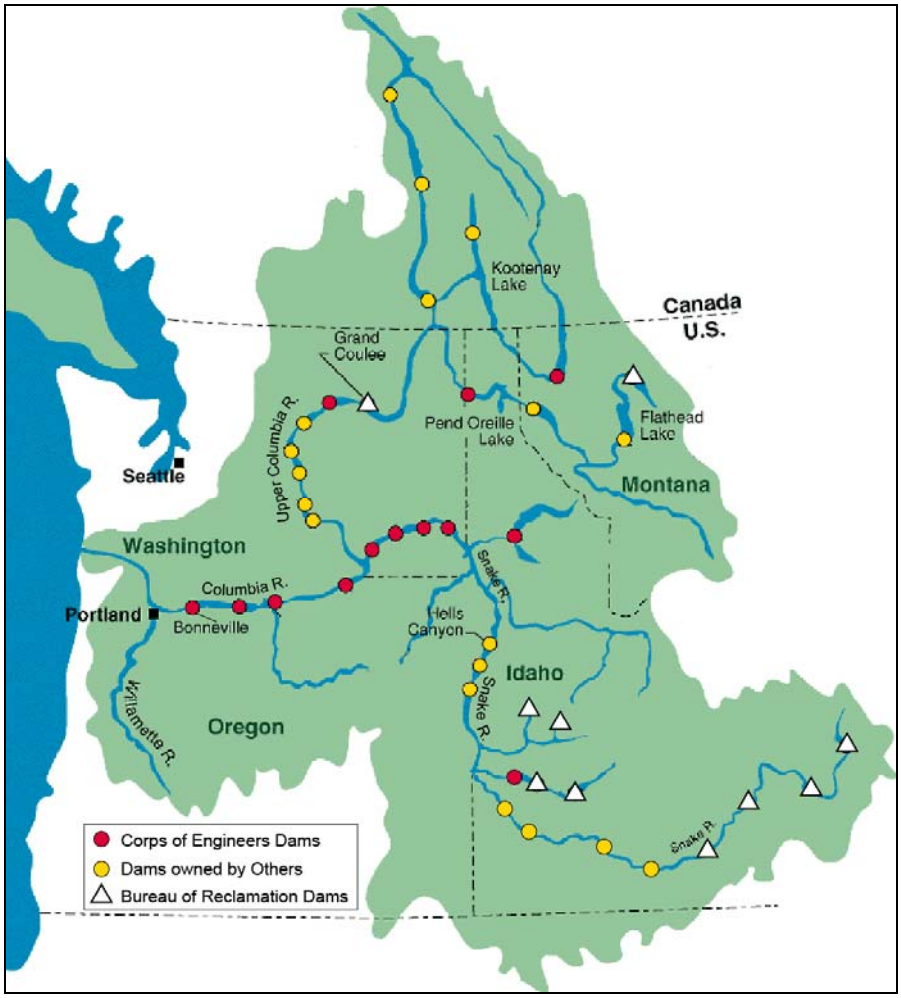
Contacts

Background

Salmon and Steelhead Listing History

Salmon and steelhead are anadromous fish, meaning they are born in freshwater, migrate to the ocean to mature, and return to their place of birth to spawn. The presence of dams makes the migrations treacherous both up and downstream. Federal dams have had an effect on salmon and steelhead populations in the Columbia Basin since the 1938 construction of Bonneville Dam, the first Federal Columbia River Power System (FCRPS) dam. FCRPS now includes federal hydropower dams in the Columbia Basin that are operated by either the Corps of Engineers (Corps) or the Bureau of Reclamation (Reclamation).[1] (See **Figure 1**.) The electric power from these projects is marketed by the Bonneville Power Administration (BPA).

Figure 1. The Columbia River Basin



Source: Congressional Research Service.

[1] See http://www.bpa.gov/power/pgf/hydrPNW.shtml.

Currently, 13 evolutionarily significant units (ESUs)[2] of salmon and steelhead[3] in the Columbia Basin are listed as threatened or endangered under the Endangered Species Act (ESA).[4] The ESA-protected fish in the Colombia River Basin are

- Snake River sockeye salmon (endangered);
- Snake River spring/summer-run (threatened);
- Snake River fall-run (threatened);
- Upper Columbia River spring-run (endangered);
- Lower Columbia River (threatened);
- Upper Willamette (threatened);
- Lower Columbia River coho (threatened);
- Columbia River chum salmon (threatened);
- Upper Columbia River steelhead (threatened);
- Snake River Basin steelhead (threatened);
- Lower Columbia River steelhead (threatened);
- Middle Columbia River steelhead (threatened); and
- Upper Willamette River steelhead (threatened).

The National Marine Fisheries Service (NMFS)[5] of the Department of Commerce has found that the estimated "current annual salmon and steelhead production in the Columbia River Basin is more than 10 million fish below historical levels, with 8 million of this annual loss attributable to hydropower development and operation."[6] Additionally, timber management and grazing have decreased habitat from "approximately 21,000 miles (33,600 km), historically, to approximately 16,000 miles (25,600 km) in 1990, largely due to management practices on U.S. Forest Service (USFS) land."[7]

[2] Federal Caucus, *Conservation of Columbia Basin Fish, Final Basinwide Salmon Recovery Strategy, Volume 1* (December 2000), available at http://www.salmonrecovery.gov/Files/BiologicalOpinions/2000/2000_Final_Strategy_Vol_1.pdf.

[3] Salmon stocks are described in terms of evolutionarily significant units, or ESUs. NMFS defines an ESU as a population or group of populations that is considered distinct for purposes of conservation under the ESA. To qualify as an ESU, a population must (1) be reproductively isolated from other populations within the same species, and (2) represent an important component in the evolutionary legacy of the species. See http://www.nmfs.noaa.gov/pr/pdfs/fr/fr56-58612.pdf.

[4] See NMFS, *Endangered Species Act Status of West Coast Salmon & Steelhead* (updated August 11, 2011), available at http://www.nwr.noaa.gov/ESA-Salmon-Listings/upload/1-pgr-8-11.pdf. There are other ESA-listed species in the Columbia River Basin, such as lamprey, sturgeon, and stellar sea lions, that are not addressed in this report.

[5] NMFS is part of the National Oceanic and Atmospheric Administration (NOAA).

[6] NMFS, Factors for Decline: A Supplement to the Notice of Determination for Snake River Fall Salmon under the Endangered Species Act, p. 3 (June 1991) (referencing a 1987 study by the Northwest Power Planning Council) (hereinafter *Fall Salmon Decline 1991 Supplement*).

[7] NMFS, *Fall Salmon Decline 1991 Supplement*, p. 5 (referencing Haugen 1991).

Today salmon and steelhead trout in the Columbia River Basin are a mixture of wild, naturally spawned fish and those produced in fish hatcheries. Experiments with artificial propagation of salmon to bolster faltering wild stocks began in the late 1800s. Today dozens of federal- and state-managed salmon and steelhead trout hatcheries in the Columbia River basin produce more fish annually than do wild stocks.

Consultation and Biological Opinions

NMFS has regulatory authority for salmon and steelhead under the ESA.[8] The ESA requires that federal actions, such as FCRPS operations, must be reviewed to determine whether they are likely to jeopardize the continued existence of threatened and endangered species or damage their critical habitat.[9] This process is called *consultation*. The three agencies listed above, the Corps, Reclamation, and BPA, are the *action agencies* for the purposes of FCRPS consultation under the ESA. Formal consultation is initiated when an action agency submits a *biological assessment* to NMFS describing the proposed action and its impact on listed species.[10] ESA consultation may be triggered by new ESA listings or new or changed federal actions. In the case of salmon and steelhead, NMFS considers the federal actions and then issues a biological opinion (BiOp) indicating whether the actions would jeopardize those species. To develop a BiOp, NMFS reviews the biological assessment to determine whether specific actions will likely jeopardize listed species or destroy or adversely modify critical habitat. If jeopardy is found, NMFS is required to include reasonable and prudent alternatives (RPAs) to the proposed action in order to avoid jeopardy.[11] Upon conclusion of the consultation process, the action agencies will receive an Incidental Take Statement from NMFS that excuses any takes (killing or harming) of listed species for the operations covered in the BiOp.[12] Without the BiOp and the incidental take statement, the action agency risks violating (and being prosecuted under) the ESA.

In addition to BiOps for FCRPS operations, NMFS issues salmonid BiOps for Upper Snake River activities and Harvest Operations (fishing). One court required the Forest Service to consult NMFS on how its management plans affected listed fish.[13]

Columbia Basin Salmon Decline

The configuration and operation of the FCRPS dams are a galvanizing issue between proponents of hydropower development, irrigation, and river navigation and those who support commercial, sport, and tribal fishing as well as environmental conservation. Downstream migration of fish at a hydropower dam involves one of four options: spill over the dams; pass through the turbines; bypass the dams via a barge or truck; or bypass back into the river.[14] Some actions thought to benefit salmon, such as spilling water to help juveniles pass safely downstream, come at a cost in

[8] 16 U.S.C. §§1531-1544. The Department of the Interior Fish and Wildlife Service (FWS) has regulatory authority under the ESA for resident fish in the Columbia Basin (those that do not migrate to the sea).

[9] 16 U.S.C. §1536(a).

[10] 16 U.S.C. §1536(c); 50 C.F.R. §402.02—definition of *biological assessment*.

[11] 16 U.S.C. §1536(b)(3)(A).

[12] 16 U.S.C. §1536(b)(4).

[13] See Pacific Rivers Council v. Robertson, 854 F. Supp. 713 (D. Or. 1993).

[14] See American Rivers v. NMFS, 126 F.3d 1118, 1120 (9th Cir. 1997).

terms of energy production. Such actions may significantly increase power rates in the region,[15] creating an economic incentive for opposition to operations designed to increase fish protection. Additionally, others may oppose flow augmentation (sometimes known as spill) because it can increase juvenile fish mortality due to injury or disorientation caused by gas bubble disease, making fish susceptible to predation. Migrating upstream where dams are present poses different problems, frequently mitigated by "fish ladders" allowing the fish to pass upstream around the dams. In addition to physical harm from the dams themselves, the facilities slow the river's flow, delaying fish movement, and increase the water temperature, both adverse to downstream migrating juveniles and upstream migrating adults.

However, Columbia Basin salmon populations have declined due to a number of human actions besides FCRPS operations, including fishing, predation by native and invasive species, water pollution, reduced habitat, and water withdrawals for irrigation.[16] Actions intended to aid the recovery of these stocks generally fall into one of four categories: habitat, harvest, hatchery, and hydrosystem.[17]

Actions to Protect Habitat

Habitat actions focus on access to, and improvement of, habitat suitable for rearing juvenile salmon and spawning by returning adults. Habitat actions may provide access to previously blocked areas, or create new areas suitable for rearing or spawning. In order to restore salmon habitat, especially where fish passage is inadequate, some older dams may be removed. Such removal often becomes an economic necessity when dam relicensing by the Federal Energy Regulatory Commission might require expensive modifications to provide for fish passage. The removal of Condit Dam on the White Salmon River, a Columbia River tributary above Bonneville Dam, began with initial breaching on October 26, 2011. Upon completion, dam removal is expected to reopen 33 miles of habitat to steelhead trout and 14 miles of habitat to salmon.

Other habitat actions include the proposal to kill some of the salmon's predators. To reduce predation on upstream migrating adult salmon, NMFS authorized Washington and Oregon to lethally take (i.e., kill) up to 85 sea lions that gather seasonally below Bonneville Dam.[18] The sea lions prey on the salmon congregating at the fish passage facilities, and their numbers have climbed over the last decade. Animal rights groups challenged the take authorization, claiming the sea lions' take of the salmon was no larger than that of commercial fishing, which the court found had not been curtailed. The Ninth Circuit held that the NMFS authorization was contrary to

[15] In 1992, it was estimated that overflow operations increased costs of BPA power supply by $60 million. Pacific Northwest Generating Cooperative v. Brown, 822 F. Supp. 1479, 1485 (D. Or. 1993).

[16] Robert T. Lackey, Denise H. Lach, and Sally L. Duncan, *Policy Options to Reverse the Decline of Wild Pacific Salmon*, Fisheries, vol. 31, no. 7 (2006), pp. 344-351. Available at http://www.epa.gov/naaujydh/pages/staff/lackey/pubs/SALMON-2100-PROJECT-SUMMARY-ARTICLE-REPRINT-2006.pdf.

According to NMFS, sea lion predation is also contributing to the decline. NMFS reported that the most recent data showed that sea lions were killing 4.2% of the run at one dam. Humane Society of the U.S. v. Gutierrez, 625 F. Supp. 2d 1052, 1060 (D. Or. 2008) (rejecting a challenge that NMFS violated environmental laws by permitting killing of sea lions), 527 F.3d 788 (9th Cir. 2008) (staying lethal take of sea lions), 558 F.3d 896 (9th Cir. 2009) (denying stay of NMFS approval for states to take sea lions).

[17] Federal Caucus, Conservation of Columbia Basin Fish, Final Basinwide Salmon Recovery Strategy, Vol. 1 (December 2000).

[18] This action is provided for in Section 120 of the Marine Mammal Protection Act (16 U.S.C. §1389).

law.[19] In May 2011, NMFS issued new authorization for Washington and Oregon to kill up to 85 California sea lions,[20] but withdrew that authorization in July 2011,[21] in response to a lawsuit.[22] In March 2012, NMFS authorized Washington, Oregon, and Idaho to resume killing sea lions.[23]

Other predators include the pikeminnow, which feed on juvenile salmon and steelhead. BPA sponsors a program that pays for each pikeminnow caught in the Columbia River. For 2012, there is a reward of $4 to $8 per pikeminnow of at least 9 inches.[24] According to BPA, since the program started, over 3.9 million pikeminnow have been caught, reducing predation on juvenile salmonids by 40%.[25]

Actions to Limit Harvest

Harvest actions focus on limiting harvest or harm to listed species through such approaches as requiring selective fishing gear or timing harvest periods to focus fishing on hatchery stocks. Fins are clipped on hatchery juveniles so sport fishers keep only hatchery fish. Although harvesting other stocks of salmon has been halted in recent years, such as off the coast of California, seasonal harvesting for Pacific salmon produced in the Columbia Basin has never been shut down.

Efforts Targeting Hatcheries

Hatchery efforts are intended to increase the number of fish through artificial propagation. Some assert that hatchery production reduces predator and harvest pressures on wild fish, while others are concerned that hatchery fish compete with wild salmon and steelhead for food and habitat. Hatcheries also may alter the genetic diversity of specific stocks. According to the Hatchery Scientific Review Group, a congressionally funded scientific review panel, hatchery management alone will not lead to the recovery of the endangered fish, but must be done in conjunction with harvest, hydropower, and habitat actions.[26] Under NMFS's Hatchery Listing Policy, hatchery fish may be considered when estimating the populations of fish for listing determinations (i.e., when deciding whether an ESU might be threatened or endangered).[27]

[19] Humane Society of the United States v. Locke, 626 F.3d 1040 (9th Cir. 2010).

[20] 76 Fed. Reg. 28733 (May 18, 2011).

[21] See Letter from Director, Office of Protected Resources, NMFS, to Director, Oregon Department of Fish and Wildlife, and Director, Washington Department of Fish and Wildlife (July 26, 2011), available at http://www.nwr.noaa.gov/Marine-Mammals/Seals-and-Sea-Lions/upload/Sec-120-LOA-withdraw.pdf.

[22] See 76 Fed. Reg. 56167 at 56168 (September 12, 2011) (referencing *Humane Society of the United States v. Locke*, No. 1:11-cv-00942-JEB (D.D.C. *voluntarily dismissed* August 15, 2011)).

[23] NOAA Press Release, *NOAA Authorizes States to Remove Sea Lions that Threaten Protected Salmon* (March 15, 2012), available at http://www.nwr.noaa.gov/Newsroom/Current/upload/03-15-2012.pdf.

[24] See 2012 Pikeminnow Sport-Reward Program, available at http://www.pikeminnow.org/info.html.

[25] *Id.*

[26] *Report to Congress on Columbia River Hatchery Reform*, p. 8 (February 2009), available at http://www.hatcheryreform.us.

[27] 70 Fed Reg. 37204 (June 28, 2005).

Actions to Alter Hydrosystem Operations

Finally, hydrosystem actions are aimed at improving the survival of juvenile and adult salmon and steelhead as they migrate past dams and through reservoirs. Hydrosystem actions include structural and operational changes at the dams, such as the addition of juvenile bypass systems and surface-oriented passage routes; the collection and transportation of juveniles in barges and trucks past the dams; the installation of structures to guide fish toward safer passage routes; and water releases either to speed travel through the river or provide safer passage past a dam. Although some federal salmon and steelhead protection measures have been in place for nearly 70 years—Bonneville Dam was constructed in 1938 with a fish ladder to allow upstream passage of returning adult salmon[28]—the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) codified a fish protection program to mitigate losses associated with the FCRPS.[29]

As an alternative to altering dam operations to make them more favorable to salmon, some parties advocate partially or entirely removing four dams on the Lower Snake River in Washington. They believe this is the only way to ensure survival of the Snake River salmon and steelhead ESUs. Dam removal could also result in economic benefits to various fishing and recreation interests. Proponents of dam removal argue that the four Lower Snake River dams do not produce a significant amount of power but do cause significant harm to listed species. They claim that removal of the Snake River dams would reduce federal expenditures and revitalize local economies.[30] Opponents of dam removal note that dam removal would only benefit 4 of the 13 listed salmon and steelhead ESUs in the Columbia Basin, and the federal agencies must focus on all of the basin's ESUs. Additionally, dam removal would preclude downstream barge transport of wheat from Idaho. The action agencies and NMFS have stated that they do not have the authority to remove dams; that would require congressional action.[31]

BiOp Litigation

Twenty years of ESA litigation has tracked each BiOp prepared, frequently altering FCRPS operations. As referenced above, when an action may jeopardize a listed species, NMFS will prepare reasonable and prudent alternatives (RPAs) to the action agencies' planned operations. Those alternatives can include habitat protection, flow alterations, and fish passage systems, such as ladders or trucks. Lawsuits have challenged the BiOp conclusions and the RPAs to alter operations, leading to revised BiOps and changed operations.

A summary of major ESA actions and litigation is presented in **Table 1**. Each BiOp issued by NMFS for FCRPS has been the subject of litigation.

[28] See http://www.nwcouncil.org/history/FishPassage.asp.

[29] P.L. 96-501, 16 U.S.C. §839.

[30] Save Our Wild Salmon, et al., *Revenue Stream* (November 2006), pp 1-2. Available at http://www.wildsalmon.org/images/stories/sos/PDFs/revenuestream8.pdf.

[31] Bonneville Power Administration and Corps, *Fact Sheet: Why Lower Snake River Dam removal is not in the Draft 2007 FCRPS BiOp* (October 2007). Available at http://www.salmonrecovery.gov/Files/ResearchReportsPublications/BiOp-and-dam-removal.pdf .

1992 BiOp—No Jeopardy

On April 10, 1992, NMFS issued its first BiOp for FCRPS, finding the operations did not jeopardize the continued existence of ESA-protected fish.[32] Additional BiOps finding no jeopardy for harvests by Pacific Ocean Fisheries and Columbia River Fisheries were issued on May 1, 1992, and June 12, 1992, respectively.[33] Suit was filed by groups that used energy generated from FCRPS (power users) who argued that the FCRPS consultation led to restricted hydroelectric operations, and the lack of other consultations on other activities, such as certain Forest Service and Bureau of Land Management actions, meant that hydropower was inappropriately burdened.[34] The lawsuit was ultimately declared moot when NMFS issued a 1993 BiOp.[35]

1993 BiOp—No Jeopardy

On May 26, 1993, NMFS issued a no jeopardy BiOp for FCRPS. In 1994, the district court found NMFS had used misleading data when determining the baseline numbers of fish in the no-jeopardy BiOp of 1993.[36] The number of fish harmed by the agency action could then appear to have less of an impact when compared to the low baseline numbers. NMFS had calculated the future success of the species based on fish counts from 1986 to 1990.[37] Those years were drought years, leading to atypically low numbers of fish that, according to the court, skewed the data on which NMFS relied. By comparison, the 1992 BiOp had used a 15-year comparison, from 1975 to 1990.[38] The court directed new consultation but did not alter FCRPS operations.

1994 BiOp—No Jeopardy

A BiOp for 1994-1998 FCRPS operations was issued in March 1994 (the 1994 BiOp[39]). Because of the overlap between the decision remanding the 1993 BiOp (March 28, 1994) and the issuance of a 1994 BiOp (March 16, 1994), the court allowed NMFS to reconsider the 1994 BiOp, rather than redo the already replaced 1993 document.[40] The decision was based on the fact that the 1994 BiOp was based on the same data the court had found was flawed in the1993 BiOp. The 1994 BiOp found no jeopardy. Power users, who had intervened as defendants at the district court level, appealed, even though NMFS, the original defendant, did not.[41] The power users claimed

---

[32] See references within Pacific Northwest Generating Cooperative v. Brown, 822 F. Supp. 1479 (D. Or. 1993). CRS is unable to locate a copy of this document.

[33] *Id.*

[34] Pacific Northwest Generating Cooperative v. Brown, 822 F. Supp. 1479 (D. Or. 1993) (holding that the power companies lacked standing to make the claim).

[35] Pacific Northwest Generative Cooperative v. Brown, 38 F.3d 1058 (D. Or. 1994) (holding that the power companies had standing but that the claims were mooted by the 1993 BiOp).

[36] Idaho Dept. of Fish and Game v. NMFS, 850 F. Supp. 886 (D. Or. 1994).

[37] Idaho Dept. of Fish and Game v. NMFS, 850 F. Supp. 886, 892 (D. Or. 1994).

[38] *Id.* at 893.

[39] The 1994 BiOp is sometimes referred to as the 1994-1998 BiOp, as it considered FCRPS operations for that time period. However, a second 1994-1998 BiOp was issued, which is sometimes referred to as the 1995 BiOp. For clarity purposes, CRS will refer to the BiOp issued March 16, 1994, as the 1994 BiOp, and the BiOp issued March 2, 1995, as the 1995 BiOp.

[40] Idaho Dept. of Fish and Game v. NMFS, 56 F.3d 1071, 1074 (9th Cir. 1995).

[41] See Idaho Dept. of Fish and Game v. NMFS, 56 F.3d 1071, 1074 (9th Cir. 1995) (referring to direct service industries (continued...)

that the standard NMFS used would be too strict in finding jeopardy. The Ninth Circuit did not evaluate these arguments, however. Instead, it found that the BiOp issued in March 1995 had rendered the 1994 BiOp moot.[42]

1995 BiOp—Jeopardy

A separate lawsuit challenged the 1994 BiOp of March 16, 1994. Environmental and fishing group plaintiffs argued that NMFS incorrectly relied on a program to transport juvenile salmon downstream around the Columbia River dams, releasing them below the Bonneville Dam, as the basis for the species not being in jeopardy. The District Court of Oregon did not review that challenge until the revised 1994-1998 operations BiOp was completed March 2, 1995. (That BiOp is known as the 1995 BiOp.) Unlike the previous three BiOps, the 1995 BiOp found that FCRPS operations were likely to jeopardize listed species.

The plaintiffs revised their argument regarding the 1994 BiOp based on the 1995 BiOp jeopardy finding. Plaintiffs argued that NMFS violated the ESA by allowing juvenile transport as a reasonable and prudent alternative to planned operations.[43] The Oregon district court rejected the argument.[44] The Ninth Circuit held that the issuance of a 1995 BiOp rendered the challenge to the 1994 BiOp moot, and remanded other claims based on the 1995 BiOp.[45] On appeal after remand, the Ninth Circuit held that the challenge to the 1995 BiOp RPA of fish transport was not ripe because that alternative was a "possible future option," not a reviewable agency action.[46]

Another lawsuit challenged BPA's adoption of the jeopardy opinion and RPAs in the 1995 BiOp. Power users who brought the suit claimed that the proposed RPAs were based on inappropriate data and failed to balance salmon protection with the production of hydroelectric power.[47] The court held that although there was scientific uncertainty regarding the salmon decline, NMFS had not acted arbitrarily or capriciously.

2000 BiOp—No Jeopardy

The 2000 BiOp found operations would not jeopardize listed fish. However, to reach this conclusion, NMFS found that eight salmon ESUs were likely to be jeopardized by the hydroelectric dams along the Columbia River, but that the proposed RPA would mitigate the harm, leading to the no-jeopardy opinion. Environmental plaintiffs took issue with the mitigation measures within the RPA, claiming that the BiOp was based on future federal actions, and also on

(...continued)

and the Pacific Northwest Generating Cooperative).

[42] Idaho Dept. of Fish and Game v. NMFS, 56 F.3d 1071, 1074 (9th Cir. 1995).

[43] American Rivers v. NMFS, No. 94-940-MA, 1995 WL 464544, *8 (D. Or. April 14, 1995).

[44] American Rivers v. NMFS, No. 94-940-MA, 1995 WL 464544 (D. Or. April 14, 1995), vacated as moot, American Rivers v. NMFS, 126 F.3d 1118 (9th Cir. 1997).

[45] American Rivers v. NMFS, 126 F.3d 1118, 1125 (9th Cir. 1997) (remanding APA claims against NMFS, and ESA claims against Reclamation and the Corps).

[46] American Rivers v. NMFS, 168 F.3d 497 (9th Cir. 1999).

[47] Aluminum Co. of America v. Bonneville Power Admin., 175 F.3d 1156 (9th Cir. 1999), *cert. denied*, 528 U.S. 1138 (2000).

future nonfederal off-site actions that were not reasonably certain to occur.[48] The 2000 BiOp was invalidated by the court, but allowed to remain in place while NMFS prepared a new one.[49]

2004 BiOp—No Jeopardy

The next BiOp, the 2004 BiOp, was also remanded to NMFS, and also allowed to remain in place while the agency prepared a new one. The litigation over the 2004 BiOp began in 2005 and did not conclude until a new BiOp was completed 2008. In May 2005, the District Court of Oregon granted a preliminary injunction requiring certain dams to allow water to flow past spill gates rather than through turbines during the summer.[50] The decision also found that NMFS used the wrong method for making the no-jeopardy determination. The Ninth Circuit affirmed the lower court decision, but remanded the action to have the district court decide if the injunction could be more narrowly tailored.[51] On remand, the district court again held that NMFS had incorrectly performed its BiOp and directed the agency to produce a new one within a year, keeping the 2004 BiOp in place until the new one was developed.[52] During that time, the parties agreed to spring and summer flow rates approved by the District Court of Oregon. Those temporary flow rates continued through 2010.

In April 2007, the Ninth Circuit affirmed the district court's decision that the NMFS 2004 BiOp violated the ESA.[53] The court criticized the agency for not considering the aggregate effects on the species when making its jeopardy determination:

> instead of assessing whether the listed fishes would be jeopardized by the aggregate of the proposed agency action, the environmental baseline, cumulative effects, and current status of the species, NMFS segregated its analysis, first evaluating whether the proposed agency action—consisting of only the proposed discretionary operation of the FCRPS—would have an appreciable net effect on a species. It considered additional context only if it found such an effect.[54]

The NMFS approach for the 2004 BiOp—to find jeopardy only if the agency action's effect on fish was appreciably worse compared to a recent baseline—would allow the fish's environment to become incrementally worse with each agency action without finding jeopardy, according to the court, thwarting the purpose of the ESA.[55] Where the species' environmental baseline already jeopardizes a species, the Ninth Circuit held that an agency may not take action that deepens the jeopardy by causing additional harm.[56] The court also found fault with NMFS's failure to adhere to its practice in earlier BiOps by considering the recovery needs of the species within the 2004

[48] National Wildlife Federation v. NMFS, 254 F. Supp. 2d 1196 (D. Or. 2003).

[49] *Id*.

[50] National Wildlife Federation v. NMFS, 2005 WL 1278878 (D. Or. May 26, 2005).

[51] National Wildlife Federation v. NMFS, 422 F.3d. 782 (9th Cir. 2005).

[52] National Wildlife Federation v. NMFS, 2005 WL 2488247 (D. Or. October 7, 2005).

[53] National Wildlife Federation v. NMFS, 481 F.3d 1224 (9th Cir. 2007).

[54] *Id.* at 1232.

[55] *Id.* at 1235.

[56] *Id.* at 1236.

BiOp. In April 2008 the Ninth Circuit amended its decision. It did not change its holding, but clarified that a recent U.S. Supreme Court ruling did not alter its conclusion.[57]

2005 Upper Snake River BiOp

The 2005 Upper Snake River BiOp was criticized for using a comparative analysis, rather than an aggregate analysis, just as was done in the 2004 FCRPS BiOp.[58] Like the 2004 BiOp, the 2005 Snake River BiOp was also remanded by the courts, but allowed to remain in place while NMFS prepared a new one. As a result, the BiOps that are currently in place for both the Upper Snake River and the FCRPS were ruled invalid under the ESA, although the operations have been revised. While the BiOps were being finalized, the district court ordered that the Columbia River be operated pursuant to the 2008 Fish Operations Plan.[59] This plan specifies how the action agencies will manage the FCRPS during the peak salmon migration times for juvenile and adult fish. New FCRPS and Upper Snake River BiOps were finalized in May 2008.[60]

2008 BiOp—No Jeopardy

The 2008 FCRPS BiOp was challenged by environmental groups, anglers, an energy conservation organization, and the state of Oregon as being arbitrary and capricious. The plaintiffs argued that NMFS created a new method of making its jeopardy analysis that was scientifically and legally flawed.[61] When issued, NMFS said the BiOp "improve[s] the prospects for [the salmon's] recovery" and was based on "the best available science."[62] But later NMFS voluntarily requested a remand in early 2010, and filed a supplement to the 2008 BiOp in May 2010.[63]

In 2011, the District Court for Oregon held that the 2008 BiOp (and its 2010 Supplement) were inadequate under the ESA. The court criticized NMFS for relying on speculative mitigation as a basis of finding no jeopardy—just as NMFS had been faulted for in the 2000 BiOp. In addition to remanding the BiOp while keeping the flow measures in place, the court directed NMFS to fund any mitigation measures that were not speculative.[64] It is not clear how this court order will affect NMFS's budget, but presumably, the court-ordered measures would take precedence over funding for discretionary items.

---

[57] National Wildlife Federation v. NMFS, 524 F.3d 917 (9th Cir. 2008) (holding that *Nat'l Ass'n of Homebuilders v. Defenders of Wildlife*, 127 S. Ct. 2581 (2007) did not affect the FCRPS BiOp as Congress imposed broad mandates, not specific actions, on the action agencies in the case of FCRPS, as opposed to the statute in the *Homebuilders* case).

[58] American Rivers v. NOAA-Fisheries, 2006 WL 1455629 (D. Or. May 23, 2006).

[59] National Wildlife Federation v. NMFS, No. 01-640-RE (D. Or. February 25, 2008).

[60] See http://www.nwr.noaa.gov/Salmon-Hydropower/Columbia-Snake-Basin/final-BOs.cfm.

[61] National Wildlife Federation v. National Marine Fisheries Service, No. CV-01-00640, 2011 U.S. Dis. LEXIS 85701, *18 (D. Or. August 2, 2011).

[62] NOAA Press Release (May 5, 2008); see http://www.nwr.noaa.gov/Newsroom/Archives/2008/loader.cfm?csModule=security/getfile&pageid=40355.

[63] NMFS, Endangered Species Act Section 7(a)(2) Consultation Supplemental Biological Opinion (May 20, 2010), available at http://www.salmonrecovery.gov/Files/FCRPS-Suppl-BO.pdf.

[64] National Wildlife Federation v. National Marine Fisheries Service, No. CV-01-00640, 2011 U.S. Dis. LEXIS 85701, *7 (D. Or. August 2, 2011).

Settlement with Tribes

In April 2008, BPA, the Corps, and Reclamation concluded a long-term settlement with Columbia Basin tribes to resolve litigation.[65] In exchange for 200 new projects (valued at about $900 million) involving habitat restoration and hatchery improvements, three lower Columbia tribes agreed not to contest the hydro BiOp nor support breaching of the four lower Snake dams for the next 10 years. However, states, environmental groups, and fishing interests, who also have acted as plaintiffs, were not included in the settlement.

Non-BiOp Litigation

Critical Habitat Determination

Other litigation has affected the way the ESA has been applied to Columbia River anadromous fish. When the Tenth Circuit Court of Appeals ruled that the FWS's method of determining critical habitat (CH) under the ESA was flawed,[66] NMFS agreed to settle a suit that challenged its CH determination for the Columbia River,[67] stating that it had used a methodology similar to FWS in determining how economic factors were used in its determination of CH.

Hatchery Listing Policy

Other litigation challenged which salmon and steelhead would be listed under the ESA based on NMFS's Hatchery Listing Policy (HLP). The HLP was issued as an interim policy in 1993. It described how the agency would consider hatchery fish when making its listing determinations for Pacific salmon and steelhead species. The interim policy concluded that hatchery fish could be in the same ESU as wild fish.[68] A federal court found that the interim policy violated the ESA by listing below the species level: if hatchery and wild salmon were in the same ESU, they should not have different listing status.[69]

NMFS revised the policy. The final hatchery listing policy (HLP) came out in 2005.[70] The HLP requires NMFS to consider the status of the ESU as a whole rather than the status of only the wild fish within the ESU when determining whether to list the species. It also provides that the entire ESU would be listed, rather than just the wild fish.

Two suits were filed in two different district courts. A suit challenging how the HLP affected steelhead trout was filed in the Western District of Washington, while a suit based on how the HLP affected salmon was filed in the District of Oregon. Two types of groups sued in the steelhead case: groups that wanted wild fish considered as distinct from hatchery fish, and groups that wanted to require NMFS to make no distinction between the origin of fish. The steelhead

[65] A copy of the agreement is available at http://www.salmonrecovery.gov/Files/BiologicalOpinions/3TribesMOA.pdf.

[66] New Mexico Cattlegrowers' Association v. U.S. Fish and Wildlife Service, 248 F.3d 1277 (10th Cir. 2001).

[67] National Association of Home Builders, Inc. v. Evans, 2002 WL 1205743 (D.D.C. April 30, 2002).

[68] 58 Fed. Reg. 17573, at 17574 (April 5, 1993).

[69] Alsea Valley Alliance v. Evans, 161 F. Supp. 2d 1154, 1161 (D. Or. 2001).

[70] 70 Fed. Reg. 37204 (June 28, 2005).

court found the HLP was invalid because it was not based on the best available scientific data.[71] The court found the HLP undermined a fundamental purpose of the ESA—to preserve natural, self-sustaining populations. The court held NMFS's downlisting of steelhead salmon from endangered to threatened by applying the HLP was invalid. But the court upheld the NMFS decision to include hatchery and wild fish in the same ESU.

The court in the salmon case held NMFS properly considered hatchery and wild fish as having different extinction risks in its listing decision.[72] The salmon court rejected the plaintiffs' argument that special regulations regarding taking salmon had to apply uniformly to hatchery and wild fish.

The Ninth Circuit Court of Appeals upheld only a portion of the steelhead court's decision, notably reversing the decision that the steelhead could not be downlisted.[73] The appellate court distinguished between the two steps of the listing process: defining the species, and then determining whether the species should be listed. The Ninth Circuit agreed with NMFS that the effects of hatchery fish on wild fish could be considered at the listing phase, not the definitional stage. The court gave discretion to NMFS's science, although it noted there may not be scientific consensus regarding the threat hatchery fish pose to wild fish. The salmon court's decision was affirmed.[74]

Litigation over Authorization to Kill Sea Lions

To reduce predation on upstream migrating adult salmon, NMFS authorized Washington and Oregon in March 2008[75] to kill sea lions that gather seasonally below the Bonneville Dam to eat salmon, steelhead, and sturgeon.[76] The authorization was revoked in November 2010, following a Ninth Circuit decision that the permit to kill was contrary to law.[77] The court found that NMFS could not justify killing sea lions when the sea lions' take of the salmon was shown to be no larger than that of commercial fishing, which it alleges had not been curtailed. In May 2011, NMFS authorized states to kill up to 85 sea lions,[78] but withdrew that authorization in July 2011,[79] in response to a lawsuit.[80] Washington, Oregon, and Idaho reapplied to NMFS for a permit

[71] Trout Unlimited v. Lohn, No. CV06-0483-JCC, 2007 WL 1795036 (W.D. Wash. June 13, 2007).

[72] Alsea Valley Alliance v. Lautenbacher, 2007 U.S. Dist. LEXIS 60203 (D. Or. 2007).

[73] Trout Unlimited v. Lohn, 559 F.3d 946 (9th Cir. 2009).

[74] Alsea Valley Alliance v. Lautenbacher, 319 Fed. Appx. 588 (9th Cir. 2009).

[75] 73 Fed. Reg. 15483 (March 24, 2008).

[76] This action is provided for in Section 120 of the Marine Mammal Protection Act (16 U.S.C. §1389).

[77] Humane Society of the United States v. Locke, 626 F.3d 1040 (9th Cir. 2010).

[78] No *Federal Register* notice was published, according to NMFS. See 76 Fed. Reg. 56167, 56168 (September 12, 2011) (referring to website: http://www.nwr.noaa.gov/Marine-Mammals/Seals-and-Sea-Lions/Sec-120-Authority.cfm). See also Humane Society of the United States v. Locke, 1:11-cv-00942 (D.D.C. *compliant filed* May 19, 2011).

[79] See Letter from Director, Office of Protected Resources, NMFS, to Director, Oregon Department of Fish and Wildlife, and Director, Washington Department of Fish and Wildlife (July 26, 2011), available at http://www.nwr.noaa.gov/Marine-Mammals/Seals-and-Sea-Lions/upload/Sec-120-LOA-withdraw.pdf.

[80] See 76 Fed. Reg. 56167 at 56168 (September 12, 2011) (referencing *Humane Society of the United States v. Locke,* No. 1:11-cv-00942-JEB (D.D.C. *voluntarily dismissed* August 15, 2011)).

to kill sea lions.[81] In March 2012, NMFS issued Letters of Authorization allowing the states to remove up to 92 animals per year through May 2016.[82]

Table 1. Chronology of Major ESA Actions and Litigation on Columbia Basin Pacific Salmon and Steelhead Trout

(cases are in bold)

Date	Action or Court Decision	Citation or Link
November 20, 1991	NMFS published determination that Snake River sockeye salmon were endangered.	56 Fed. Reg. 58619
January 3, 1992	FWS published notice that Snake River sockeye salmon had been listed as endangered.	57 Fed. Reg. 212
April 10, 1992	NMFS issued its first BiOp for operation of the FCRPS, the 1992 BiOp, finding no jeopardy.	
April 22, 1992	NMFS published determinations that Snake River spring/summer-run Chinook salmon and Snake River fall-run Chinook salmon were threatened.	57 Fed. Reg. 14653
May 1, 1992	NMFS issued no jeopardy BiOp for harvests by Pacific Ocean Fisheries.	
June 3, 1992	NMFS published a correction of its determination that Snake River spring/summer-run Chinook salmon and Snake River fall-run Chinook salmon were threatened. In its correction, NMFS clarified that the ESU includes populations in the Clearwater River.	57 Fed. Reg. 23458
June 12, 1992	NMFS issued no jeopardy BiOp for harvest for Columbia River Fisheries Management Plan.	
April 1, 1993	**District court held that power users lacked standing to challenge three BiOps of 1992.**	**Pacific Northwest Generating Cooperative v. Brown, 822 F. Supp. 1479 (D.D.C. 1993)**
May 26, 1993	NMFS issued its second BiOp for operation of the FCRPS, the 1993 BiOp, finding no jeopardy.	
October 25, 1993	**District Court held that the Forest Service violated the ESA for failing to consult on Wallowa-Whitman & Umatilla National Forest land management plan's impacts on salmon.**	**PRC v. Robertson, No. 92-1322-MA (D. Or. October 25, 1993)**
December 2, 1993	The Corps, Reclamation, and BPA forwarded a biological assessment to NMFS with a request for consultation on the 1994-1998 operation of the FCRPS.	
December 28, 1993	NMFS published critical habitat (CH) designations for Snake River sockeye salmon, Snake River spring/summer-run Chinook salmon, and Snake River fall-run Chinook salmon.	58 Fed. Reg. 68543

[81] 76 Fed. Reg. 56167 (September 12, 2011).

[82] NOAA Press Release, *NOAA Authorizes States to Remove Sea Lions that Threaten Protected Salmon* (March 15, 2012), available at http://www.nwr.noaa.gov/Newsroom/Current/upload/03-15-2012.pdf.

Date	Action or Court Decision	Citation or Link
March 16, 1994	NMFS issued "Section 7 Consultation, BiOp, Reinitiation of Consultation on 1994-1998 Operation of the Federal Columbia River Power System and Juvenile Transportation Program in 1995 and future years," a.k.a 1994 BiOp, finding no jeopardy.	
March 28, 1994	**District court held that the 1993 BiOp was held arbitrary and capricious, in part for using a baseline of 1984-1990 for data, even though 1986-90 were drought years, rather than the 1975-90 baseline typically used. The court found the BiOp did not include structural improvements to dams when it included dams in the baseline.**	**Idaho Dept. of Fish and Game v. NMFS, 850 F. Supp. 2d 886 (D. Or. 1994), vacated as moot by 56 F.3d 1071 (9th Cir. 1995)**
August 18, 1994	NMFS published an emergency interim rule wherein NMFS determined that Snake River spring/summer-run Chinook salmon and Snake River fall-run Chinook salmon warranted reclassification from threatened to endangered.	59 Fed. Reg. 42529
September 28, 1994	**Power users challenged three 1992 BiOps—FCRPS, and two harvest BiOps. The challenge to the FCRPS BiOp was declared moot due to 1993 consultation.**	**Pacific Northwest Generating Cooperative v. Brown, 38 F.3d 1058 (9th Cir. 1944), amending and superseding 25 F.3d 1443**
March 2, 1995	NMFS issued a revised BiOp for the 1994-1998 FCRPS operations, a.k.a 1995 BiOp, finding jeopardy.	
April 14, 1995	**District court rejected claim that transporting juveniles as part of RPA within 1995 BiOp violated ESA.**	**American Rivers v. NMFS, No. 94-940-MA (D. Or. April 14, 1995)**
April 2, 1997	**Court held that suit based on 1994 BiOp was moot because the 1995 BiOp had already replaced it.**	**American Rivers v. NMFS, 109 F.3d 1484 (9th Cir. 1997); amended 126 F.3d 1118 (9th Cir. September 26, 1997)**
August 18, 1997	NMFS published determinations that Upper Columbia River steelhead trout were endangered and the Snake River Basin steelhead trout were threatened. NMFS extended the deadline for a final listing determination for Lower Columbia River steelhead trout.	62 Fed. Reg. 43937 and 43974
January 12, 1998	NMFS, citing improvements in the status of the ESUs, withdrew its proposed rule to reclassify Snake River spring/summer-run Chinook salmon and Snake River fall-run Chinook salmon from threatened to endangered.	63 Fed. Reg. 1807
January 21, 1998	Action agencies (Corps, BPA, and Reclamation) transmitted their Biological Assessment for 1998 and Future Operation of the Federal Columbia River Power System, Upper Columbia and Lower Snake River Steelhead to NMFS.	
March 19, 1998	NMFS published a determination that Lower Columbia River steelhead trout were threatened.	63 Fed. Reg. 13347
May 14, 1998	NMFS issued its Supplemental BiOp to the 1995 BiOp.	

Date	Action or Court Decision	Citation or Link
February 5, 1999	NMFS proposed CH for endangered Upper Columbia River steelhead trout as well as threatened Snake River Basin, Lower Columbia River, Upper Willamette River, and Middle Columbia River steelhead trout.	64 Fed Reg. 5740
March 24, 1999	NMFS published determinations that Lower Columbia River and Upper Willamette River Chinook salmon were threatened, and that the Upper Columbia River spring-run Chinook salmon were endangered.	64 Fed. Reg. 14308
March 25, 1999	NMFS published a determination that Columbia River chum salmon were threatened. NMFS published determinations that Middle Columbia River and Upper Willamette River steelhead trout were threatened.	64 Fed. Reg. 14508 and 14517
May 10, 1999	**Industrial users of BPA energy challenged changes imposed by the NMFS BiOp for Snake River sockeye and spring/summer and fall Chinook salmon. The court found BPA was not arbitrary in adopting the RPAs in NMFS jeopardy opinion.**	**Aluminum Co. of America v. Bonneville Power Admin., 175 F.3d 1156 (9th Cir. 1999), cert. denied, 528 U.S. 1138 (2000)**
August 2, 1999	FWS published a notice listing Lower Columbia River and Upper Willamette spring-run Chinook salmon, Columbia River chum salmon, and Middle Columbia River and Upper Willamette River steelhead trout as threatened, and listing Upper Columbia River spring-run Chinook salmon as endangered.	64 Fed. Reg. 41835
February 16, 2000	NMFS published CH designations for Lower Columbia River, Upper Willamette River, and Upper Columbia River spring-run Chinook salmon; Columbia River chum salmon; and Upper Columbia River, Snake River Basin, Lower Columbia River, Upper Willamette River, and Middle Columbia River steelhead trout.	65 Fed. Reg. 7764
July 10, 2000	NMFS published Section 4(d) rule to regulate activities affecting threatened species for Snake River Basin, Lower Columbia River, Middle Columbia River, and Upper Willamette River steelhead trout; and for Snake River spring/summer-run, Snake River fall-run, Lower Columbia River and Upper Willamette River Chinook salmon, and Columbia River chum salmon.	65 Fed. Reg. 42422
December 21, 2000	NMFS issued 2000 BiOp for FCRPS impacts on salmon and steelhead.	Available online[a]

Date	Action or Court Decision	Citation or Link
April 30, 2002	**District court accepted the consent order that vacated the CH designations for salmon and steelhead, pursuant to 10th Circuit decision finding FWS did not use economic factors correctly. [New Mexico Cattlegrowers' Association v. U.S. Fish and Wildlife Service, 248 F.3d 1277 (10th Cir. 2001).] NMFS had used a similar method for the Columbia River.**	**National Association of Home Builders, Inc. v. Evans, 2002 WL 1205743 (D.D.C. April 30, 2002)**
May 7, 2003	**District court invalidated the 2000 BiOp and remanded it to NMFS, finding the no jeopardy determination was arbitrary and capricious because NMFS limited the scope to mainstems of Columbia and Snake, and relied on nonfederal mitigation.**	**National Wildlife Federation v. NMFS, 254 F. Supp. 2d 1196 (D. Or. 2003)**
September 29, 2003	In response to the April 30, 2002 court order, NMFS removed CH designations for Lower Columbia River, Upper Willamette River, and Upper Columbia River spring-run Chinook salmon; Columbia River chum salmon; and Upper Columbia River, Snake River Basin, Lower Columbia River, Upper Willamette River, and Middle Columbia River steelhead trout.	68 Fed. Reg. 55900
June 14, 2004	NMFS proposed relisting Upper Willamette River, Lower Columbia River, Middle Columbia River, Snake River Basin, and Upper Columbia steelhead trout; Upper Willamette River, Lower Columbia River, Snake River fall-run and Snake River spring/summer-run Chinook salmon; and Columbia River chum salmon as threatened as well as Snake River sockeye salmon and Upper Columbia River spring-run Chinook salmon as endangered (to reflect how the inclusion of certain hatchery stocks might influence listing determinations). In addition, Lower Columbia River coho salmon were proposed to be listed as threatened.	69 Fed. Reg. 33102
August 10, 2004	**Plaintiffs challenged the March 1999 listing of four salmon. The court stayed the listing of Upper spring-run salmon, Puget Sound, Lower Columbia River, and Upper Willamette spring-run salmon, pending final hatchery policy (due June 14, 2005).**	**Common Sense Salmon Recovery v. Evans, 329 F. Supp. 2d 96 (D.D.C. 2004)**
November 30, 2004	NMFS issued 2004 BiOp on FCRPS operations' impact on salmon and steelhead, finding no jeopardy.	Available online[b]
March 31, 2005	FWS issued a BiOp (2005 Upper Snake River BiOp) on operations and maintenance of the Reclamation Upper Snake River Basin Projects above Brownlee Reservoir.	Available online[c]
May 26, 2005	**District court issued a preliminary injunction blocking implementation of the 2004 BiOp, and ordering summer water through spillgates rather than through turbines at certain dams.**	**National Wildlife Federation v. NMFS, 2005 WL 1278878 (D. Or. May 26, 2005)**

Date	Action or Court Decision	Citation or Link
June 28, 2005	NMFS relisted Upper Columbia River spring-run Chinook salmon and Snake River sockeye salmon as endangered as well as Lower Columbia River/Southwest Washington coho salmon, Snake River fall-run, Snake River spring/summer-run, Lower Columbia River, and Upper Willamette River Chinook salmon, and Columbia River chum salmon as threatened.	70 Fed Reg. 37160
September 1, 2005	**Appellate court affirmed the district court opinion of May 26, 2005, that the 2004 BiOp for FCRPS was flawed. The Ninth Circuit found no abuse of discretion in district court injunction, and remanded the issue of whether the district court's preliminary injunction was narrowly tailored. [District court decision: 2005 WL 1278878 (D. Or. May 26, 2005).]**	**National Wildlife Federation v. NMFS, 422 F.3d. 782 (9th Cir. 2005)**
October 7, 2005	**District court remanded the 2004 BiOp to NMFS, directing NMFS and action agencies to comply with ESA, and to complete new BiOp within one year. The decision kept the 2004 BiOp in place while new one was being drafted.**	**National Wildlife Federation v. NMFS, 2005 WL 2488247 (D. Or. October 7, 2005)**
January 5, 2006	NMFS relisted Snake River basin steelhead trout, Lower Columbia River steelhead trout, Upper Willamette River steelhead trout, and Middle Columbia River steelhead trout as threatened.	71 Fed. Reg. 834
May 23, 2006	**District court rejected the 2005 Upper Snake BiOp for using a comparative approach to determine jeopardy, saying the NMFS should have aggregated the effects. The court found NMFS failed to consider combined effects from proposed action and existing baseline. The court clarified that NMFS did not abuse its discretion in separating Upper Snake from rest of Columbia, but that a more cohesive strategy would occur if BiOp considered them both.**	**American Rivers v. NOAA-Fisheries, 2006 WL 1455629 (D. Or. May 23, 2006)**
September 26, 2006	**The court remanded the 2005 Upper Snake BiOp but left it in place while NMFS prepared new one.**	**American Rivers, Inc. v. NOAA-Fisheries, 2006 WL 2792675 (D. Or. September 26, 2006)**
April 9, 2007	**The Ninth Circuit affirmed the October 7, 2005, district court decision, rejecting the 2004 BiOp for failing to consider nondiscretionary projects' impacts, failing to incorporate degraded baseline, and inadequately evaluating impacts of dams. The court criticized the use of comparative approach rather than aggregate.**	**National Wildlife Federation v. NMFS, 481 F.3d 1224 (9th Cir. 2007)**
June 13, 2007	**District court in Washington found that NMFS's downlisting of Columbia River steelhead due to hatchery listing policy (HLP) violated the ESA, and set aside the HLP.**	**Trout Unlimited v. Lohn, 2007 WL 1795036 (W.D. Wash. June 13, 2007)**

Date	Action or Court Decision	Citation or Link
August 14, 2007	**District court upheld NMFS listing (even though entire ESU is given same listing status, NMFS considered effects on hatchery & wild salmon separately).**	**Alsea Valley Alliance v. Lautenbacher, No. 06 6093 HO (D. Or. August 14, 2007)**
August 21, 2007	Action agencies issued a biological assessment for effects of the FCRPS.	Available online[d]
	Reclamation issued a biological assessment on operations and maintenance of Upper Snake River Basin Projects above Brownlee Reservoir.	Available online[e]
October 31, 2007	NMFS released a draft revised BiOp on operation of the FCRPS and Upper Snake projects for salmon and steelhead.	Superseded by the final BiOp on operation of the FCRPS, Upper Snake projects, and harvest of salmon and steelhead, issued May 5, 2008
February 25, 2008	**The court ordered that the FCRPS would be operated pursuant to the 2008 Fish Operations Plan until the 2008 BiOp was finished in August, 2008.**	**National Wildlife Federation v. NMFS, No. 01-640-RE (D. Or. February 25, 2008)**
March 24, 2008	NMFS authorized Washington, Oregon, and Idaho to use lethal force on no more than 85 California sea lions identified as preying on migrating salmonids.	73 Fed. Reg. 15483
April 24, 2008	**Ninth Circuit amended its April 2007 decision to clarify that the Supreme Court decision in Nat'l Ass'n of Homebuilders v. Defenders of Wildlife, 127 S. Ct. 2581 (2007), did not alter its ruling.**	**National Wildlife Federation v. NMFS, 524 F.3d 917 (9th Cir. 2008)**
May 5, 2008	NMFS released the final BiOp on operation of the FCRPS, Upper Snake projects, and harvest of salmon and steelhead.	Available online[f]
March 16, 2009	**Ninth Circuit reversed lower court by upholding NMFS hatchery listing policy regarding steelhead, including downlisting the fish. Hatchery and natural fish can be same ESU but still considered separately for listing purposes. Ninth Circuit affirmed that NMFS policy rightly distinguished between hatchery and natural salmon in the listing process.**	**Trout Unlimited v. Lohn, 559 F.3d 946 (9th Cir. 2009); Alsea Valley Alliance v. Lautenbacher, 319 Fed. Appx. 588 (9th Cir. 2009)**
August 24, 2009	NMFS reclassified Upper Columbia River steelhead trout as threatened in response to March 16, 2009, court decision.	74 Fed. Reg. 42605
May 20, 2010	NMFS submitted Supplemental Biological Opinion to 2008 BiOp.	Available online[g]
November 23, 2010	**Ninth Circuit rejected NMFS authorization for Washington and Oregon to take up to 85 sea lions.**	**Humane Society of the United States v. Locke, 626 F.3d 1040 (9th Cir. 2010)**
May 18, 2011	NMFS issued Letter of Authorization to Washington and Oregon for lethal takes of up to 85 California sea lions.	76 Fed. Reg. 28733

Date	Action or Court Decision	Citation or Link
July 22, 2011	NMFS notified Washington and Oregon that Letter of Authorization to use lethal force against California sea lions is revoked effective July 27, 2011.	http://www.nwr.noaa.gov/Marine-Mammals/Seals-and-Sea-Lions/upload/Sec-120-LOA-withdraw.pdf
August 2, 2011	**District court rejected Supplemental Biological Opinion to 2008 BiOp.**	**National Wildlife Federation v. NMFS, No. 01-640-RE (D. Or. August 2, 2011)**
September 12, 2011	NMFS announced receipt of application by Washington, Oregon, and Idaho to take California sea lions near the Bonneville Dam.	76 Fed. Reg. 56167
March 15, 2012	NMFS announces Letter of Authorization for Idaho, Oregon, and Washington to use lethal force against California sea lions through May 2016.	http://www.nwr.noaa.gov/Newsroom/Current/upload/03-15-2012.pdf

Source: Congressional Research Service.

a. https://pcts.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.summary_list_biop?p_id=12342.

b. http://www.bpa.gov/corporate/pubs/rods/2005/EFW/BPA_Decision_Document_BiOp.pdf.

c. http://www.fws.gov/idaho/publications/BOs/Final.pdf.

d. http://www.salmonrecovery.gov/Files/BiologicalOpinions/BA_MAIN_TEXT_FINAL_08-20-07_Updated_08-27.pdf.

e. http://www.usbr.gov/pn/programs/UpperSnake/index.html.

f. http://www.nwr.noaa.gov/Salmon-Hydropower/Columbia-Snake-Basin/final-BOs.cfm.

g. http://www.nwr.noaa.gov/Salmon-Hydropower/Columbia-Snake-Basin/final-BOs.cfm.

Author Contact Information

(name redacted)
Legislative Attorney
[redacted]@crs.loc.gov, 7-....

(name redacted)
Analyst in Natural Resources Policy
[redacted]@crs.loc.gov, 7-....

Acknowledgments

Retired CRS specialist Gene Buck made important contributions to this report.