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Giving Suckers (and Salmon) an Even Break: Klamath Basin Water and the Endangered Species Act

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I. INTRODUCTION

An extreme drought hit the Klamath River Basin of southern Oregon and northern California in 2001, and a remarkable water controversy soon followed. Hundreds of farmers, who for decades had reliably received irrigation water from the federal government's Klamath Project, were told, for the first time, that they would get none that year. Instead, the government would hold the water in Upper Klamath Lake and release it to flow down the Klamath River in an effort to ensure the survival of fish protected by the Endangered Species Act.

The irrigators and their political allies were outraged, and they complained loudly and bitterly that the Endangered Species Act had gone too far.[1] Before long the Klamath Basin water crisis was receiving prominent coverage in the regional, national and even international media.[2] Many stories basically portrayed a deceptively simple scenario: the federal government had abruptly broken its promise to deliver water to hard-working family farmers, wrecking their lives and communities, all for the sake of saving some endangered sucker fish that had no value to anyone.[3]

In fact the Klamath Basin water crisis was nowhere near that simple, but the other elements of the story came out much more slowly and quietly. It was not all about farmers, suckers, and the Endangered Species Act. There were also Native American tribes, commercial fishing families, conservationists, and birdwatchers. There were salmon,

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1. *See* Eric Bailey, *The State Parched Farmers Pour out Frustrations over Water Policy Agriculture: On Oregon Border, Symbolic Bucket Brigade Calls Attention to Irrigation Rights Ruling*, L.A. TIMES, May 8, 2001, at B7.

2. *See id.*

3. *See, e.g.*, Douglas Jehl, *Cries of 'Save the Suckerfish' Rile Farmers' Political Allies*, N.Y. TIMES, June 20, 2001, at A1.

giant wild trout, hundreds of bald eagles, and millions of waterfowl.[4] There were treaties, Supreme Court cases, and a host of other legal factors. The reality of the Klamath crisis is as complex and fascinating as the rich diversity of life, human and otherwise, that relies on Klamath Basin waters.[5]

The crisis reached its apex in July and August, as hundreds of protesters—many of them not actually farmers—staged an extended protest at the A Canal headgate in Klamath Falls, Oregon, a federal water-control structure that normally supplies Klamath Project water to irrigate farm fields.[6] On several occasions, protesters illegally took direct action to force open this headgate, sending small amounts of water flowing down the canal.[7] These symbolic and highly controversial actions brought even more media attention to the Klamath crisis.[8]

September 11, of course, brought a far greater crisis to the nation. Within a day or two, the protesters quietly left the A Canal headgate.[9] The news media turned their attention almost exclusively to anthrax, Afghanistan and Ashcroft. By the end of the year, major storms seemed to have broken the drought in the Klamath Basin, and most of Oregon turned its attention to more immediate problems, including the nation's highest unemployment rate and a crushing budget deficit for state government.[10]

The worst of the Klamath water crisis may have passed, at least for now. But it is important, both for the Klamath Basin and the entire western United States, to remember the crisis and understand its root causes. As for the Klamath itself, there has still been little progress in resolving a fundamental problem: too many demands for too little water, especially in dry years. If the next drought arrives in the basin before that basic problem is addressed, the events of 2001 could be repeated.

The rest of the West should also take a lesson from the Klamath experience. While unusual in some respects, the Klamath Basin is in many ways typical of the West. The upper Klamath Basin is mostly semi-arid to arid, with most precipitation coming in the form of winter

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4. NAT'L MARINE FISHERIES SERV., BIOLOGICAL OPINION [ON] ONGOING KLAMATH PROJECT OPERATIONS 7 (Apr. 6, 2001) [hereinafter 2001 NMFS BO].

5. *See, e.g.*, Michael Milstein, *The Ecosystem of the Klamath Basin*, OREGONIAN, Aug. 29, 2001, at B7.

6. *See* Bailey, *supra* note 1, at B7.

7. *See id.*

8. *See, e.g.*, Betinna Boxall, *State Officials Cut Off Flow of Water to Farmers Drought*, L.A. TIMES, Aug. 24, 2001, at B11.

9. *Id.*

10. Sam How Verhoveck, *Northwest Goes from High-Tech to High Jobless*, N.Y. TIMES, Dec. 13, 2001, at A22.

snows in the high country.[11] The largest water user by far is agricultural irrigation, which has the highest demand in the summer months when natural supplies are lowest.[12] Aquatic ecosystems suffer from too little water and from poor water quality; and many native fish and wildlife species are in serious trouble.[13] These environmental problems have a variety of human impacts, especially for tribes whose water needs have not been satisfied despite the strength of their legal claims.[14] As more aquatic species are found to be at risk of extinction, the Endangered Species Act has become an increasingly major factor in water management, especially where water is managed by the federal government.[15] These aspects of the Klamath water situation are fairly common throughout the West, making the basin a very relevant example for the region.[16]

This Article analyzes the underlying factors of the 2001 water crisis and the lessons to be learned from it, with an emphasis on federal court cases regarding water management under the Endangered Species Act.[17] Part I of this Article provides background information on water and its diverse uses in the Klamath Basin, and on the legal framework for managing that water. Part II explores the development of the Klamath Basin crisis and examines the roots of the crisis over the past twenty-five years and the events that triggered it in 2001. Part III discusses some ways that the ESA will apply to federal water projects, analyzing the results of two recent federal cases on Klamath Project operations. In conclusion, Part IV offers some points to consider in assessing the basic fairness of recent results in the Klamath.

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11. *See* Sue McClurg, *The Klamath River Basin: A Microcosm of Water in the West*, W. WATER MAG., May/June 2000, at 4, 7.

12. *Id.*

13. *Id.* at 9-11, 13.

14. *Id.* at 10-11.

15. *See id.* at 10.

16. *Id.* at 4-6.

17. Note that this Article does not address developments in the Klamath Basin beyond 2001.

II. WATER IN THE KLAMATH BASIN AND THE LEGAL FRAMEWORK FOR MANAGING IT

A. Klamath Basin Waters and Their Uses

1. Water and Fishery Resources in the Klamath Basin

Straddling the Oregon-California border, the Klamath River Basin covers over 12,000 square miles.[18] With an average annual discharge of more than 17,000 cubic feet per second, the Klamath is the third-largest river on the U.S. West Coast.[19] Its headwaters are in Oregon, with most precipitation falling as snow in the mountains; mean annual precipitation in the upper basin, however, is only 13.5 inches, and very little rain falls in the summer months.[20]

The Klamath River flows south out of Upper Klamath Lake, Oregon's largest lake and the focal point of the recent controversy over water in the basin. Several rivers feed Upper Klamath Lake, most notably the Williamson, Wood, Sprague, and Sycan. The Lost River historically occupied its own closed basin, but the Bureau of Reclamation has re-routed the Lost so that its waters can be routed into the Klamath basin.[21] After flowing into California, the Klamath is joined by the Scott, Shasta, Salmon, and Trinity Rivers before reaching the Pacific Ocean south of Crescent City.[22]

Historically, the Klamath was a very productive salmon river, with the third-largest runs on the U.S. West Coast.[23] Salmon populations have declined dramatically, however, for many reasons.[24] The crash of Klamath River salmon runs has forced drastic restrictions on commercial salmon fishing off northern California and southern Oregon, with major economic impacts on coastal fishing communities.[25] Recognizing these

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18. LUNA B. LEOPOLD, A VIEW OF THE RIVER 99-101 (1994).

19. *Id.* Only the Columbia and Sacramento are larger.

20. U.S. DEP'T OF THE INTERIOR, KLAMATH PROJECT 1998 ANNUAL OPERATIONS PLAN ENVIRONMENTAL ASSESSMENT 4 (1998) [hereinafter KLAMATH PROJECT 1998 EA].

21. OR. WATER RES. DEP'T, RESOLVING THE KLAMATH 8 (1999).

22. McClurg, *supra* note 11, at 4, 7.

23. Milstein, *supra* note 5, at B7.

24. The construction of hydropower dams on the Klamath River completely blocked salmon from all their habitats in the Oregon portion of the basin by the 1920s. McClurg, *supra* note 11, at 10-11. Federal scientists have identified numerous reasons for the decline of Klamath Basin salmon populations, including habitat degradation, harvest, water diversions, and artificial propagation. Specific habitat problems "include changes in channel morphology, substrate changes, loss of instream roughness and complexity, loss of estuarine habitat, loss of wetlands, loss and/or degradation of riparian areas, declines in water quality, altered stream flows, impediments to fish passage, and elimination of habitat," 2001 NMFS BO, *supra* note 4, at 8.

25. Jonathan Brinckman, *Farmers Aren't First Left High and Dry*, OREGONIAN, Sept. 4, 2001, at A1.

problems, Congress passed the Klamath River Basin Fishery Resources Restoration Act in 1986, but this law has not met its goal of restoring healthy salmon runs to the basin.[26] Today, the only reasonably healthy salmon stock in the Klamath River is fall chinook, and even these runs have declined by an estimated eighty percent.[27]

Salmon are not the only Klamath Basin fish that have long been valued by humans.[28] The Lost River and shortnose suckers were once used for a variety of economic uses; there was even a sucker cannery on the Lost River.[29] Long before white settlement in the Klamath Basin, however, suckers were a vital food fish for Native Americans, who called them c'wam and qapdo. [30] Inhabiting Upper Klamath Lake, the Lost River system and other parts of the upper basin, these fish may live longer than thirty years, but their populations have crashed, leaving them now in danger of extinction.[31]

2. Klamath Basin Tribes

The original human inhabitants of the Upper Klamath Basin were the Klamath Tribe, the Modoc Tribe, and the Yahooskin Band of Snake Indians.[32] They are believed to have occupied this area for more than 10,000 years, and when whites first arrived in the basin, these tribes controlled approximately 22 million acres of land.[33] Sustained by the historic abundance of the upper basin's rivers, lakes, and marshes, the tribes thrived by fishing, hunting, and gathering.[34] In an 1864 treaty with the United States, these tribes ceded about ninety percent of this land while reserving their rights to hunt, fish, and gather, and settled on a

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26. 16 U.S.C. § 460ss-1 through ss-6 (2000). The law directs the United States Department of the Interior to "formulate, establish, and implement a 20-year program to restore the anadromous fish populations of the Area to optimum levels and to maintain such levels." 16 U.S.C. § 460ss-1(b)(1).

27. McClurg, *supra* note 11, at 11.

28. Upper Klamath Lake and its tributaries also support a fine sport fishery for exceptionally large trout. The owner of a local angling lodge boasts that "the Upper Klamath is home to the largest native trout in the world, period." OR. WATER RES. DEP'T, *supra* note 21, at 27.

29. *Id.* at 9. There was also a very popular sport fishery for the suckers, sometimes called "mullet," until population declines forced the fishery to close in the 1980s. Prof. Douglas F. Markle, Oregon State University, Remarks at the Vomocil Water Quality Conference, Corvallis, Or. (Nov. 6, 2001).

30. McClurg, *supra* note 11, at 9. The tribal names for the Lost River and shortnose suckers seem to have a variety of alternative spellings.

31. *Id.* at 9-10. Habitat loss and water quality problems are thought to be responsible for the suckers' decline. *Id.* at 10.

32. OR. WATER RES. DEP'T, *supra* note 21, at 11.

33. *Id.*

34. *Id.*

reservation north of the modern-day city of Klamath Falls, Oregon.[35] For purposes of the treaty, they became known collectively as the Klamath Tribes.

Acting on the federal Indian policy of the day, Congress terminated its recognition of the Klamath Tribes and eliminated their reservation in 1954.[36] With the Klamath Restoration Act of 1986, Congress reversed course and restored federal recognition of the Klamath Tribes, but did not return their reservation.[37] The rights were terminated over the tribes' objections, and despite the money paid to them over the years as compensation for the loss of their land, the Klamaths remain among the poorest people in Oregon.[38]

Two other federally recognized Indian tribes, the Yurok and Hoopa Valley, hold reservations along the lower Klamath River in California.[39] Their reservations were established by executive orders in 1855, 1876, and 1891, and the Hoopa-Yurok Settlement Act of 1988.[40] The tribes rely heavily on Klamath River fish runs for their livelihood, as they have for untold generations.[41] Today these tribes are impoverished, in part because of the decline of the Klamath River fishery.[42]

The Klamath, Hoopa Valley, and Yurok Tribes have the right to take fish from the waters of the Klamath Basin, and, significantly, the right to enough water to support a viable fishery. As explained below, however, these rights have never been satisfied in practice.[43]

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35. United States v. Adair, 723 F.2d 1394, 1397-98 (9th Cir. 1984).

36. 25 U.S.C. § 564 (1994).

37. Klamath Restoration Act of 1986, Pub. L. No. 99-398, 100 Stat. 849 (1986) (codified as amended at 25 U.S.C. § 566 (1999)).

38. OR. WATER RES. DEP'T, *supra* note 21, at 12-15.

39. KLAMATH PROJECT 1998 EA, *supra* note 20, at 7. A third tribe, the Karuk, holds tribal trust lands along the Klamath River, rather than a reservation. *Id.*

40. *See* Hoopa-Yurock Settlement Act, 25 U.S.C. § 1300i (1994).

41. The leader of the Yurok Tribe wrote:

> For centuries, the Klamath River has sustained the Yurok People with two large runs of chinook salmon, steelhead, sturgeon, lamprey eels and candlefish (eulachon) to supply the people's needs. The river was central to the everyday lives of the Yurok people, and it is difficult to convey the overwhelming importance that it has to them. "It is our veins and arteries," said one elder in an interview. "The river flows like our blood."

Letter from Susie L. Long, Chairperson, Yurok Tribe, All Persons Concerned with the Klamath River and Its Anadromous Fish 2 (Mar. 5, 1996) (on file with author).

42. Orna Izakson, *Broken Chain: A Hundred Years of Bad Ideas, Greed and Region Trash a Sensitive Ecosystem and Its People*, EUGENE WKLY., Nov. 1, 2001, at 25.

43. *See infra* notes 73-75 and accompanying text.

3. Irrigation

Soon after the Upper Klamath Basin tribes signed their treaty with the United States, white settlers began arriving in the area.[44] Farmers dug the basin's first irrigation ditch in 1868.[45] Natural lakes and marshes covered much of the upper basin, however, and these lands would have to be "reclaimed" before the Klamath Basin could develop a strong agricultural base.[46]

The federal government—specifically, the Reclamation Service, forerunner to the Bureau of Reclamation—took the lead in converting the upper basin to agricultural use. Congress authorized the Klamath Project in 1905, making it one of the oldest projects in the federal reclamation program.[47] Over the course of sixty years, the Bureau constructed dams and diversions, re-plumbed the area to allow water to flow back and forth between the Klamath and Lost River Basins, and built hundreds of miles of canals and drains.[48] The project now irrigates about 200,000 acres of agricultural land in Oregon and California.[49]

Only about half of the irrigated land in the Klamath Basin receives water from the Klamath Project. Roughly another 200,000 acres of agricultural land receive water from other, nonfederal sources, primarily the Wood, Williamson, Sprague, and Sycan Rivers that feed Upper Klamath Lake.[50] In Klamath County, Oregon, "which has the distinction of having the largest amount of water manipulation and recycling in the state," irrigation accounts for ninety-three percent of water withdrawals.[51]

Klamath Project water is very important for many farm families and for the local agricultural economy, although there is some disagreement about the number of farms affected and the actual economic significance of this irrigation to the Klamath Basin.[52] While the economics of

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44. McClurg, *supra* note 11, at 8.

45. *Id.*

46. Ancestral Lake Modoc once covered more than one thousand square miles of the upper basin, and at the time of white settlement, perhaps 375,000 acres of this area remained in lakes, marshes and wetlands. OR. WATER RES. DEP'T, *supra* note 21, at 10, 18.

47. KLAMATH PROJECT 1998 EA, *supra* note 20, at 4.

48. OR. WATER RES. DEP'T, *supra* note 21, at 18.

49. KLAMATH PROJECT 1998 EA, *supra* note 20, at 4.

50. McClurg, *supra* note 11, at 9; *see also* Michael Milstein, *Clearing up Water Issues on Klamath Basin*, OREGONIAN, Aug. 29, 2001, at B8.

51. OR. WATER RES. DEP'T, *supra* note 21, at 22.

52. The Klamath Project delivers water to about 1400 farms, but most are "hobby farms"; fewer than half of these farm households receive a majority of their income from agriculture. Milstein, *supra* note 50, at B8. According to the Bureau of Reclamation, direct farm income from Klamath Project lands averaged about $100 million per year from the mid-1980s to mid-1990s. KLAMATH PROJECT 1998 EA, *supra* note 20, at 54. The head of the local Oregon State University experiment station once wrote that "Klamath Basin agriculture . . . generates more than $400

irrigation in the basin are open to debate, attitudes on this subject are pretty much crystal clear: Klamath Project farmers believe that the water belongs to them, they will fiercely defend their right to use it, and the local community will support them in doing so.[53]

4. Additional Demands on Klamath Basin Water

Prior to white settlement, lakes, marshes, and wetlands covered much of the Upper Klamath Basin and provided habitat for a wide variety of wildlife. In 1908, President Theodore Roosevelt signed an executive order creating Lower Klamath National Wildlife Refuge, the first refuge in the nation to be established specifically for waterfowl.[54] Today, the basin's six national wildlife refuges are home to dozens of bird species, and provide habitat to about eighty percent of all waterfowl migrating on the Pacific Flyway.[55] In the winter they also harbor 500 to 1,000 bald eagles, the largest such population in the lower forty-eight states.[56]

Like other elements of the Klamath Basin ecosystem, wetland habitats have deteriorated sharply over the past few decades.[57] An estimated eighty percent of the basin's wetlands have been converted to other uses, primarily agriculture, and migrating bird numbers have fallen from approximately six million to one approximately million over the past century.[58] The remaining refuges often provide less than ideal wildlife habitat, partly because the refuges do not have a reliable water supply: the wetlands primarily receive water from the Klamath Project and most of that water has flowed incidentally to the refuges after draining from the irrigated fields.[59] Portions of the refuges are leased for

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million in economic activity annually, employs more workers than any other segment of our economy, and affects (positively) every business and service organization in the region." Dr. Kenneth A. Rykbost, *R.I.P. for Agriculture?*, KLAMATH FALLS HERALD & NEWS, May 5, 1997, at 5. By contrast, a study by the economic consulting firm of ECONorthwest concluded that, thirty years ago, farm sector earnings accounted for 8% of Klamath County's total income. By 1998, this figure had plummeted to .5%. Ernie Niemi et al., *Coping for Competition for Water: Irrigation, Economic Growth, and the Ecosystem in the Upper Klamath River Basin* 12-15 (2001), *available at* http://www.salmonandeconomy.org/econ_reports.html.

53. Bailey, *supra* note 1, at B7.

54. OR. WATER RES. DEP'T, *supra* note 21, at 20.

55. KLAMATH PROJECT 1998 EA, *supra* note 20, at 37-39. The six national wildlife refuges are Bear Valley, Clear Lake, Klamath Marsh, Lower Klamath, Tule Lake, and Upper Klamath. *Id.* at 39.

56. Michael Milstein, *Klamath Refuges Go Thirsty*, OREGONIAN, July 13, 2001, at A1, A15.

57. Milstein, *supra* note 5, at B7.

58. Milstein, *supra* note 56, at A15.

59. *Id.*

commercial farming, a practice that has been controversial in recent years.[60]

Hydropower generation is another major water use in the Klamath Basin. The utility, Pacificorp, owns a series of dams on the mainstem Klamath River, the lowest of which, Iron Gate, stands several miles below the Oregon-California state line. The first of these dams, built around 1920, blocked salmon and other anadromous fish from reaching their historic habitat in the upper part of the basin. Under the terms of its federal hydropower license issued by the Federal Energy Regulatory Commission (FERC), Pacificorp must pass certain flows at Iron Gate Dam to support salmon and other aquatic life downstream.[61]

Klamath Basin waters also support various recreational and tourist activities that are economically important to the basin. These activities include trout fishing on Upper Klamath Lake and its tributaries, birdwatching on the wildlife refuges, sightseeing at Crater Lake National Park, sailing on Upper Klamath Lake, and whitewater boating on the Klamath River.[62] These activities are often impaired, however, by serious and stubborn water quality problems that plague many parts of the Klamath Basin.[63]

Unlike many parts of the West, the Klamath Basin has not experienced rapid population growth, and municipal water demands have not been much of a factor. The basin's largest city is Klamath Falls, Oregon, with just under 20,000 people.[64] Klamath Falls' population grew by only ten percent in the 1990s, half as fast as the rest of Oregon.[65] By contrast, the nearest city to the west, Medford, grew by thirty-five percent in the 1990s, while Bend, the nearest city to the north, grew by 154%.[66]

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60. Jeff Barnard, *At Klamath Basin, Testing the Water; Scarce Supply Threatens Farms, Wildlife*, WASH. POST, Apr. 8, 2001, at A9.

61. *See* Klamath Water Users Ass'n v. Patterson, 15 F. Supp. 2d 990, 993 (D. Or. 1998). Private hydropower facilities such as Pacificorp's dams on the Klamath require an operating license from the Federal Energy Regulatory Commission, or FERC. 16 U.S.C. § 817 (2000).

62. OR. WATER RES. DEP'T, *supra* note 21, at 25.

63. This water pollution contributes to algae blooms in Upper Klamath Lake that can be incredibly intense. In the words of one longtime resident, "In the summer, the algae gets thick enough to plow." *Id.* at 26-28; *see also* McClurg, *supra* note 11, at 13. A leading guide to Oregon whitewater rivers describes a fifteen mile reach of the Klamath River as follows: "This dam-release run provides paddlers with some of the most exciting 'brownwater' in the Northwest. Brownwater? The Klamath drains the warm, shallow Upper Klamath Lake, which supports an abundant growth of algae during the summer. The results are beautiful brownwater rapids and suds-filled slack water." WILLAMETTE KAYAK & CANOE CLUB, SOGGY SNEAKERS: A GUIDE TO OREGON RIVERS 244 (3d ed. 1994).

64. Bill Graves, *Count Puts Oregon's Changing Face in Focus*, OREGONIAN, Mar. 15, 2001, at A1, A14.

65. *See id.*

66. *See id.*

B. The Legal Framework for Managing Klamath Basin Water

1. Federal Water Projects

A century ago Congress passed the Reclamation Act of 1902, launching a federal program of large-scale projects to irrigate the arid West.[67] Under this program the United States Department of the Interior would build dams, canals and other facilities, and operate these projects to supply water to small family farms.[68] By the 1990s, the United States Bureau of Reclamation (USBR) had built hundreds of projects throughout seventeen western states, with 347 storage reservoirs, 268 major pumping plants, and over 60,000 miles of water distribution canals, pipelines and ditches.[69]

USBR delivers irrigation water to over nine million acres, roughly one-fifth of the irrigated land in the western United States.[70] This water is often called "project water" because it is stored, diverted, or delivered by the facilities of a federal Reclamation project.[71] The United States Court of Appeals for the Ninth Circuit has made it clear that project water is legally distinct from other kinds of water:

> A distinction must be recognized between the nature of nonproject water, such as natural flow water, and project water, and between the manner in which rights to use of such waters are obtained. Right to use of natural-flow water is obtained in accordance with state law. In most western states it is obtained by appropriation—putting the water to beneficial use upon lands. Once the rights are obtained they vest, until abandoned, as appurtenances of the land upon which the water has been put to use. Project water, on the other hand, would not exist but for the fact that it has been developed by the United States. . . . The terms upon which it can be put to use, and the manner in which rights to continued use can be acquired, are for the United States to fix. If such rights are subject to becoming vested beyond the power of the United States to take without compensation, such vesting can only occur on terms fixed by the United States.[72]

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67. Act of June 17, 1902, ch. 1093, 32 Stat. 388 (codified in scattered sections of 43 U.S.C. (1994)).

68. U.S. Bureau of Reclamation, Final Environmental Impact Statement, Acreage Limitation and Water Conservation Rules and Regulations 3-2 (Feb. 1996) (on file with author).

69. *Id.*

70. *Id.* ch. 3, at 1.

71. *See* Reed D. Benson, *Whose Water Is It? Private Rights and Public Authority over Reclamation Project Water*, 16 VA. ENVTL. L.J. 363, 369-72 (1997) (providing an overview of legal issues associated with the control and use of project water).

72. Israel v. Morton, 549 F.2d 128, 132-33 (9th Cir. 1977); *see also* Flint v. United States, 906 F.2d 471, 477 (9th Cir. 1990).

Irrigators receive Reclamation project water through contracts with USBR.[73] In most cases, USBR contracts with an organization of water users, such as an irrigation district, which in turn delivers project water to individual farms.[74] The most common type of contract is a "repayment contract," whereby USBR supplies water in return for repayment of a portion of the costs of building, operating, and maintaining a project.[75] USBR also has some "water service contracts," whereby it provides annual water deliveries for a specified term of years in return for an agreed rate of payment.[76] Each contract also has a variety of additional provisions, some unique to that contract, some common to nearly all contracts.[77] One standard term, which has become increasingly important in recent years, excuses the government from liability if for some reason it is unable to deliver a full supply of water.[78] Most Klamath Project water is delivered through repayment contracts; there are more than 250 contracts in total, all written in perpetuity.[79]

In building, operating, and delivering water from its projects, USBR generally must comply with state water laws.[80] States may therefore impose conditions on Reclamation projects, although not if those conditions would frustrate congressional intent or important federal interests.[81] So long as the federal and state governments shared a common overriding goal of ensuring sufficient water supplies for irrigation, there were few conflicts. As USBR began taking steps to change the management of its projects to serve a broader range of interests, however, friction with the western states has increased. In the Klamath Basin, the State of Oregon contends that USBR is violating

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73. Benson, *supra* note 71, at 371.
74. *Id.* at 371, 393.
75. *Id.* at 371.
76. *Id.*
77. *Id.* at 393-401.
78. *See* Barcellos & Wolfsen, Inc. v. Westlands Water Dist., 849 F. Supp. 717, 722 (E.D. Cal. 1993), *aff'd sub nom.* O'Neill v. United States, 50 F.3d 677, 680 (9th Cir. 1995); Westlands Water Dist. v. U.S. Dep't of the Interior, 805 F. Supp. 1503, 1511 (E.D. Cal. 1992), *aff'd sub nom.* Westlands Water Dist. v. Firebaugh Canal Co., 10 F.3d 667, 674 (9th Cir. 1993) (holding that the Bureau can determine whether to apportion at all).
79. U.S. Fish & Wildlife Service, Biological/Conference Opinion Regarding the Effects of Operation of the Bureau of Reclamation's Klamath Project on the Endangered Lost River Sucker, Endangered Shortnose Sucker, and Threatened Bald Eagle, and Proposed Critical Habitat for the Lost River/Shortnose Suckers, § II, pt. 1, at 39 (Apr. 6, 2001) [hereinafter USFWS 2001 BO].
80. The basis for this requirement is section 8 of the 1902 Reclamation Act, 43 U.S.C. § 383 (1994).
81. *See* United States v. Cal. State Water Res. Control Bd., 694 F.2d 1171, 1177 (9th Cir. 1982).

state water law in its operation of the Klamath Project by providing water for purposes not recognized under state law.[82]

2. State Water Laws and Proceedings

While USBR, as operator of the Klamath Project, is perhaps the most important water manager in the Klamath Basin, state law nonetheless plays a key role in determining where and how water is used. Because most of the Klamath Project's main water storage and diversion facilities are located in Oregon, they operate within the context of Oregon water law, both substantive and procedural.

As in the other western states, Oregon water law is based on the doctrine of prior appropriation, and has been since the state enacted its first comprehensive water code in 1909.[83] Under this system, all water is owned by the public, but the state issues "water rights" that authorize a certain amount of water to be taken from its natural course and applied to a specified "beneficial use."[84] These water rights are considered to be private property, and, once established, they generally last forever so long as the water continues to be used.[85] The oldest water rights have the highest priority—hence the term, "first in time, first in right." In times of shortage, those who have junior water rights are shut off so that enough water remains to satisfy senior rights; the law does not provide for shortages to be shared among users.[86]

Until 1955, Oregon water law offered no means of protecting water in its natural course in order to preserve fish and wildlife habitat, and only in 1987 did it recognize water rights for maintaining stream flows and lake levels.[87] These measures had a key shortcoming, however, in that they were subject to all water rights existing at the time they were established.[88] In other words, aquatic ecosystems were protected only within the context of prior appropriation, and in many areas all the water was already being used for irrigation and other purposes in the summer and fall. Even today, where instream water rights do not exist or where senior water rights use up too much of the available water supply, Oregon law does not ensure that rivers, streams, and lakes have enough water to protect fish, wildlife, and the health of aquatic ecosystems. In fact, only

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82. Letter from Stephen E.A. Sanders, Oregon Assistant Attorney General, to Martha Pagel, Oregon Water Resources Director (Mar. 18, 1996) (on file with author).

83. OR. REV. STAT. §§ 537.110-537.330 (1999).

84. *Id.* §§ 537.110, 537.160.

85. *Id.* § 537.250(3).

86. *See* Phillips v. Gardner, 469 P.2d 42, 44 (1970).

87. OR. REV. STAT. §§ 537.455-537.500, 537.332-537.360.

88. *See* statutes cited *supra* note 87.

about twenty percent of Oregon's instream water rights are reliably satisfied in the summer and fall.[89]

Since 1909, anyone seeking to make a new use of water has first needed a permit from the State of Oregon authorizing that use.[90] Before that time, any person could establish a water right simply by diverting water from its natural course and applying it to a beneficial use. As in other western states, Oregon provides a process, called a "general stream adjudication," to determine all of the pre-permit water rights in a particular river basin or stream system.[91] Adjudications tend to be large, complex proceedings through which a state water agency and court, over the course of many years, will determine the water rights of virtually all users in a particular basin. Water users who have a "claim" in the adjudication are allowed to continue taking water while the matter is pending.

The State of Oregon commenced the Klamath Basin Adjudication in 1975, and it continues to this day.[92] This adjudication will determine approximately 700 claims to water, of which about 300 have been filed by private water users (largely for irrigation), and another 400 by federal agencies and the Klamath Tribes.[93] The largest single claimant is USBR, which claims a 1905 water right for the Klamath Project.[94]

3. Reserved Water Rights

While most water rights are created by operation of state law, reserved water rights for Indian Reservations and federal lands are a major exception to this rule.[95] The Reserved Rights Doctrine provides that when the United States designates land for a particular purpose, it also claims enough water to fulfill the primary purposes of that designation.[96] The United States Supreme Court developed this doctrine in a 1908 case involving an Indian Reservation,[97] and over the course of

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89. OR. PROGRESS BD., OREGON STATE OF THE ENVIRONMENT REPORT 2000, at 16 (Sept. 2000), *available at* www.econ.state.or/us/opb/soer2000/index.html.

90. OR. REV. STAT. § 537.130.

91. *Id.* § 539.005.

92. *See* Oregon Water Resource Dep't, *Klamath Basin Adjudication Calendar*, *at* http://www.wrd.state.or.us/~hranactK/Klamath_calendar/Klamath_calendar.htm (last visited Mar. 13, 2002).

93. *See* Oregon Water Resource Dep't, *Index of Claimants*, *at* http://www.wrd.state.or.us/publication/pdfs/Kba_index.pdf (last visited Mar. 14, 2002).

94. Meg Reeves, Oregon Water Resources Department, *Klamath Basin Issues*, Address at the Oregon Water Law Conference (Oct. 18, 2001) (on file with author).

95. *See* Benson, *supra* note 71, at 416-26.

96. Cappaert v. United States, 426 U.S. 128, 138-46 (1976).

97. Winters v. United States, 207 U.S. 564, 576-78 (1908).

the twentieth-century it was extended to other federal lands such as national forests and national monuments.[98]

Like state-approved water rights under prior appropriation, federal reserved water rights carry a definite priority date, usually the date that the federal government designated land for a particular purpose. They support a particular "beneficial use" of water, consistent with the primary purpose of the federal designation, and generally provide for a specific quantity of water from a specific source. In these respects, reserved water rights are very similar to western state water rights, and they should be able to fit well within the prior appropriation scheme.

In practice, however, many federal and tribal reserved water rights have never been established or fulfilled. In the West, reserved water rights tend to be controversial for several reasons, and are typically opposed by state governments and traditional water users.[99] States do not recognize reserved water rights until they have been judicially confirmed and quantified, and remarkably, these federal and tribal claims are subject to the jurisdiction of state courts in the context of a general stream adjudication.[100] Since the Supreme Court's 1976 decision in *Colorado River Water Conservation District v. United States*, nearly all proceedings to determine federal and tribal reserved rights have taken place in state court.[101]

There are a large number of federal and tribal reserved water rights in the Klamath Basin, none of which have yet been quantified or satisfied.[102] Under the 1864 treaty establishing the Klamath Reservation, the Klamath Tribes hold water rights to support their traditional hunting, fishing, and gathering lifestyle.[103] In the lower basin, the Yurok and Hoopa Valley Tribes also hold reserved water rights for their reservations

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98. Arizona v. California, 373 U.S. 546, 575-601 (1963).

99. *See* Reed D. Benson, *Can't Get No Satisfaction: Securing Water for Federal and Tribal Lands in the West*, 30 ENVTL. L. REP. 11,056, 11,056 (2000).

100. *Id.* at 11,057. The 1952 McCarran Amendment provides in part:

> Consent is hereby given to join the United States as a defendant in any suit (1) for the adjudication of rights to the use of a river system or other source, or (2) for the administration of such rights, where it appears that the United States is the owner or is in the process of acquiring water rights by appropriation under State law . . . .

43 U.S.C. § 666 (1994).

101. 424 U.S. 800 (1976) (holding that the McCarran Amendment had not deprived the federal courts of jurisdiction over federal and tribal water right claims, but rather that the federal courts should commonly defer to state proceedings).

102. *See* Memorandum from Meg Reeves and Walter Parry, Assistant Attorneys General to Richard Bailey, Adjudicator Klamath Adjudication (Sept. 30, 1999) (on file with author).

103. As explained below, the Klamath Tribes' water rights were confirmed by the federal courts in 1983, but they await quantification in the State of Oregon's Klamath Adjudication. *See infra* note 127 and accompanying text.

along the Klamath River, with priority dates as early as 1855, to support the tribal salmon fishery.[104] Finally, there are many reserved right claims pending in the Klamath Adjudication for a wide variety of federal lands, including claims for the national wildlife refuges with priority dates as early as 1908.[105]

4. The Endangered Species Act

The Endangered Species Act (ESA), signed into law by President Nixon in 1973, is the nation's most controversial environmental law and arguably the toughest. Its purpose is the conservation of endangered and threatened species[106] and the ecosystems on which they depend.[107] The ESA prohibits "take"—that is, killing or harming[108] of a member of a protected species by any person, including government agencies.[109]

Federal agencies have additional responsibilities under section 7 of the ESA, including a general duty to use their authorities to conserve listed species.[110] Perhaps more importantly, the ESA requires that every federal agency "shall . . . insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence" of any threatened species, or adversely modify its designated critical habitat.[111] Under section 7, this substantive standard of "no jeopardy" is coupled with a mandatory process known as

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104. The Department of Interior explained:

> Fishing rights held by the Yurok and Hoopa Valley Tribes entitle them to take fish for ceremonial, subsistence, and commercial purposes. The tribes also hold water rights to an instream flow sufficient to protect the right to take fish within their reservation. The tribes' water rights include the right to prevent others from depleting the stream flow below a protected level and the right to water quality and flow to support all life stages of fish.

KLAMATH PROJECT 1998 EA, *supra* note 20, at 7 (citations omitted).

105. *See* Index of Claimants, *supra* note 93.

106. 16 U.S.C. § 1532 (2000). The ESA defines an endangered species as one that is "in danger of extinction throughout all or a significant portion of its range," *id.* § 1532(6), while a threatened species is one that is "likely to become an endangered species within the foreseeable future." *Id.* § 1532(20). Through rules issued under section 4(d) of the ESA, *id.* § 1533(d), the law typically applies equally to both types of species.

107. *Id.* § 1531(b).

108. "*Take*" is defined broadly at 16 U.S.C. § 1533(19).

109. Section 9 of the ESA, 16 U.S.C. § 1538(a), prohibits take by "*any person*," which is defined broadly at 16 U.S.C. § 1532(13).

110. *Id.* § 1536(a)(1). The *policy* section of the ESA also directs all federal agencies to, first, utilize their authorities to conserve threatened and endangered species, and second, cooperate with state and local agencies "to resolve water resource issues in concert with conservation of endangered species." *Id.* § 1631(c)(2).

111. *Id.* § 1536(a)(2).

"consultation."[112] The Ninth Circuit Court of Appeals has explained consultation as follows:

> In order to ensure compliance with the Act, the ESA and its implementing regulations require federal agencies ("action agencies") to consult with the appropriate federal fish and wildlife agency . . . whenever their actions "may affect an endangered or threatened species." *See* 50 C.F.R. § 402.14(a). Thus, if the agency determines that a particular action will have no effect on an endangered or threatened species, the consultation requirements are not triggered. If the action agency subsequently determines that its action is "likely to adversely affect" a protected species, it must engage in formal consultation. *Id.* Formal consultation requires that the consulting agency . . . issue a *biological opinion determining whether the action is likely to jeopardize the listed species and describing, if necessary, reasonable and prudent alternatives* that will avoid a likelihood of jeopardy. *See* 16 U.S.C. § 1535(b)(3)(A). But if the action agency determines that an action is "not likely to adversely affect" the species, it may attempt informal consultation. *See* 50 C.F.R. § 402.13(a). This does not end the consultation process. The consulting agency must issue a written concurrence in the determination or may suggest modifications that the action agency could take to avoid the likelihood of adverse effects to the listed species. *See* 50 C.F.R. § 402.13(b). If no such concurrence is reached, the regulations require that formal consultation be undertaken. *See* 50 C.F.R. § 502.14.[113]

A couple of clarifying points on this process: an action agency's determination whether its proposed action "may affect" a listed species is called a biological assessment (BA), while the consulting service's determination whether the proposed action is likely to jeopardize the species is called a biological opinion (BO).[114] Also, if the threatened or endangered species is an oceangoing species such as salmon, the National Marine Fisheries Service (NMFS) of the Commerce Department is the consulting agency; for all other species, the United States Fish and Wildlife Service (USFWS) of the Interior Department is the consulting agency.[115]

The ESA provides another important procedural safeguard by limiting agency action during the course of the consultation process.[116] Section 7(d) of the ESA provides that after initiating consultation, the

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112. *Id.*

113. Pac. Rivers Council v. Thomas, 30 F.3d 1050, 1054 n.8 (9th Cir. 1994) (emphasis added).

114. 16 U.S.C. § 1536(c).

115. *See id.* § 1533(a).

116. *Id.* § 1536(d).

action agency "shall not make any irreversible or irretrievable commitment of resources" that could prevent or foreclose the development of alternative measures to prevent jeopardy.[117] Thus, section 7(d) requires agencies during consultation to keep all their options open for taking actions to conserve protected species.[118]

The federal courts, especially the Ninth Circuit Court of Appeals, have emphasized the importance of federal agency compliance with the ESA's procedural requirements, which provide for "a systematic determination of the effects of a federal project on endangered species. If a project is allowed to proceed without substantial compliance with those procedural requirements, there can be no assurance that a violation of the ESA's substantive provisions will not result. The latter, of course, is impermissible."[119]

III. A CRISIS IN THE MAKING

A. Roots of the Crisis, 1975-2000

The Klamath water crisis may have seemed to blow up suddenly, with little or no advance warning, but that perception is largely inaccurate. While no one predicted that 2001 would bring one of the worst droughts in the recorded history of the basin, in fact the stage was set for a major conflict since at least 1997;[120] only a series of wet years kept it from happening sooner. As discussed in this Part, the man-made elements of the Klamath situation had actually been developing for over a decade.

1. Tribal Water Claims

The Klamath Tribes filed suit in 1975 to obtain a declaration of their water rights in the area of their former reservation.[121] Within months, the State of Oregon commenced a water right adjudication for the Klamath Basin, but the federal courts retained jurisdiction over the tribes' case in order to determine the purposes and priorities of their water rights.[122] In *United States v. Adair*, the Ninth Circuit held that the

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117. *Id.*

118. *See id.*

119. Thomas v. Peterson, 753 F.2d 754, 764 (9th Cir. 1985) (citing TVA v. Hill, 437 U.S. 153, 184-93 (1978)). *See also* Natural Res. Def. Council v. Houston, 246 F.3d 1118, 1125 (9th Cir. 1998) (regarding ESA requirements for USBR water contract renewals).

120. Jeff Barnard, *Scientists Delve into Complex Klamath Water Crisis*, COLUMBIAN, Nov. 9, 2001, at C4.

121. United States v. Adair, 723 F.2d 1394, 1398 (9th Cir. 1983).

122. *Id.* at 1399.

Klamath Tribes have a right to "the amount of water necessary to support [their] hunting and fishing rights as currently exercised to maintain the livelihood of Tribe members," and that this right has the oldest and highest priority possible.[123]

Adair was decided in 1983, but these water rights have never been fulfilled. The federal courts confirmed the existence and priorities of the tribes' water rights, but left it to the State of Oregon to quantify them in the ongoing Klamath Basin Adjudication.[124] Slowed by jurisdictional disputes, the adjudication has made limited progress in resolving any claims, including the Tribes'.[125] Even now it seems clear that the tribal water rights will not actually be determined for several more years. The State of Oregon, however, has taken a legal position on the standard for quantifying them, reading *Adair* very narrowly and suggesting that the tribes' water claims might be cut back drastically in the Adjudication.[126]

During the adjudication, Oregon has refused to manage water either in favor of, or against, a pending claim, essentially leaving all the basin's water users to fend for themselves. The state maintains that it lacks authority to regulate at this stage, but the legal basis for this position has never been entirely clear; it may be grounded in policy as much, or more than, law.[127] In any event, the state's hands-off stance effectively favors

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123. Over the objections of the state of Oregon and Klamath irrigators, the court held that the tribes' water rights to support hunting and fishing held a priority date of "time immemorial," rather than the 1864 date of their treaty with the United States. The court noted:

> [T]he Klamath Tribe . . . has depending upon the waters in question to supports its hunting and fishing activities for over 1,000 years. It would be inconsistent with the principles we follow in today's decision to hold that the priority of the Tribe's water rights is any less ancient than the 'immemorial' use that has been made of them.

Id. at 1414 n.22.

124. *Id.* at 1399. Under the McCarran Amendment, 43 U.S.C. § 666 (1994), federal and tribal water right claims are subject to state court jurisdiction in the context of a general stream adjudication. Since the Supreme Court's decision in *Colorado River Water Conservation District v. United States*, 424 U.S. 800 (1976), nearly all litigation over tribal water claims has occurred in these adjudications, not in federal court.

125. *See generally* United States v. Oregon, 44 F.3d 758 (9th Cir. 1996).

126. Memorandum from Meg Reeves & Walter Perry, *supra* note 102. This memorandum discusses the Klamath Adjudication BIA/Klamath Tribes claims in support of hunting, fishing and gathering rights, DOJ File No. 690-600-6NO269-97. Believing that the State of Oregon had misinterpreted *Adair* to their detriment, the Tribes moved to reopen the federal case in 2001. Brief of Amici Curiae Klamath Tribes, *United States v. Adair*, No. CV75-914 (filed Jan. 16, 2001).

127. Letter from Stephen E.A. Sanders, *supra* note 82. A legal authority cited in this letter is *Rettkowski v. Department of Ecology*, 858 P.2d 232 (Wash. 1993), a case decided by a sharply divided Washington court based entirely on Washington statutes. Attorneys for both Klamath Project irrigators and conservation groups have viewed the State's refusal to regulate as a policy position. *See* Reed D. Benson, *Maintaining the Status Quo: Protecting Established Water Uses in*

irrigators, who have been using Klamath Basin water for many years, and disadvantages the Tribes, whose water rights have never been satisfied in practice.

In the 1990s, the tribes along the Klamath River also began pushing strongly for the Klamath Project to begin releasing more water to boost flows in the river, with the goal of rebuilding salmon populations in the lower basin.[128] The Yurok Tribe was particularly active, sponsoring a scientific study that called for increased flow releases to the river in most months, especially April through July.[129] Attorneys for the Tribe wrote a series of letters to federal officials maintaining that their trust responsibility to the tribes required USBR's Klamath Project to provide Klamath River flows based on the best available science—and at that time, no one had any better science than the Yurok study.[130] Studies of Klamath River flow requirements have continued, but there has been no effort to secure a judicial determination of the lower basin tribes' water rights.[131]

2. ESA Listings

For the first fifteen years after the passage of the Endangered Species Act, the only Klamath Basin species protected by the ESA was the bald eagle.[132] The Klamath national wildlife refuges are some of the nation's most significant bald eagle habitat, especially in the wintertime, and an adequate water supply for the refuges in the fall and winter is vital for eagle populations.[133] The refuges rely on the Klamath Project for their water supply, but wildlife refuges and bald eagles have never been a

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the Pacific Northwest, Despite the Rules of Prior Appropriation, 28 ENVTL. L. 881, 902, 906-16 (1998).

128. Conservation, sport, and commercial fishing organizations were also pushing hard for increased flows to support Klamath River salmon runs. *See, e.g.*, Letter from Trygve B. Sletteland, Sierra Club Legal Defense Fund, to Kirk Rodgers, U.S. Bureau of Reclamation (written on behalf of various conservation and fishing groups, urging USBR to release more water down the Klamath River) (May 30, 1996) (on file with author).

129. *See* Report prepared by Trihey & Assocs. on behalf of Yurok Tribe, Instream Flow Requirements for Tribal Trust Species in the Klamath River (Mar. 1996) (on file with author).

130. *See, e.g.*, Letter from Richard A. Cross, attorney for the Yurok Tribe, to Roger Patterson and Michael Ryan, U.S. Bureau of Reclamation (Mar. 15, 1996) (on file with author).

131. *See* Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 138 F. Supp. 2d 1228, 1232-37 (N.D. Cal. 2001) (discussing the evolution of science regarding Klamath River flow needs for anadromous fish).

132. The bald eagle was listed in 1978 as a threatened species in Michigan, Minnesota, Oregon, Washington, and Wisconsin, and an endangered species everywhere else in the lower forty-eight states. Recovery of bald eagle populations caused the United States Fish & Wildlife Service to down-list the bald eagle to "threatened" status throughout the lower 48 in 1995. USFWS 2001 BO, *supra* note 79, § III, pt. 1, at 2-3.

133. *Id.* § III, pt. 1, at 8-14.

major limiting factor in operating the Project; most of the refuges' water supply, in fact, has come in the form of agricultural runoff from irrigated fields.[134]

By the mid-1980s, many of the Klamath Basin's most important fisheries had crashed.[135] The Lost River and shortnose suckers, historically so abundant that "a man with a pitch fork could throw out a wagon load in an hour," were listed as endangered in 1988.[136] According to USFWS, "they were at risk of extinction owing to significant population declines with continued downward trends, a lack of recent recruitment, range reduction, habitat loss/degradation and fragmentation, potential hybridization, competition and predation by exotic fishes, and other factors."[137]

Most Klamath River salmon runs were also in serious trouble. By 1985, Klamath chinook salmon populations were so low that all commercial salmon harvest on the Pacific Ocean was shut down from Fort Bragg, California, to Port Orford, Oregon.[138] In 1997, coho salmon were listed as a threatened species in the Klamath River.[139] According to National Marine Fisheries Service (NMFS), "information on coho salmon population status or trends in the Klamath River Basin is incomplete, but what information exists suggests adult populations are small to nonexistent in some years."[140]

ESA protection for the suckers and salmon held major implications for the management and use of Klamath Project water. The Lost River and shortnose suckers inhabited Upper Klamath Lake and the reservoirs in the Lost River system—the same places that USBR was using to store and supply water for irrigation.[141] The presence of endangered fishes in these areas meant that USBR would sometimes have to hold water in the lakes to preserve their habitat.[142] But, while suckers needed water in the upper basin, salmon needed it in the lower basin, and the coho listing

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134. *Id.* § III, pt. 1, at 9.

135. *See id.* § III, pt. 2, at 1.

136. *Id.* The "pitchfork" statement was attributed to a 1900 story from the Klamath Republican newspaper. *Id.*

137. *Id.* § III, pt. II, at 1-2.

138. McClurg, *supra* note 11, at 8.

139. Endangered and Threatened Species; Threatened Status for S. Or./N. Cal. Coast Evolutionarily Significant Unit (ESU) of Coho Salmon, 62 Fed. Reg. 24,588, 24,607 (May 6, 1997). This population of coho salmon is found along the southern Oregon and northern California coast, and thus is sometimes referred to as SONCC coho. *Id.* at 24,588.

140. 2001 NMFS BO, *supra* note 4, at 7.

141. *See* USFWS 2001 BO, *supra* note 79, § III, pt. 2, at 17.

142. *See* Klamath Water Users Protective Ass'n v. Patterson, 191 F.3d 1115, 1122 (9th Cir. 1999).

added great legal strength to the demands of the downriver tribes for the Klamath Project to increase releases to the river below Iron Gate Dam.[143] In dry years, these upstream/downstream water requirements would potentially conflict with each other, and certainly would conflict with irrigation demands from the Klamath Project.

3. Klamath Project Operating Plans

The process of changing Klamath Project operations began in earnest in 1992, when USBR produced its initial BA on these operations and requested formal consultation with the Fish & Wildlife Service.[144] In its 1992 BO, USFWS established certain minimum lake levels intended to preserve sucker habitat, but authorized USBR to allow Upper Klamath Lake to drop even lower in four years out of ten.[145] As it turned out, USBR allowed the lake to fall to the dry-year minimum level of 4137 feet in 1992, and even below the minimum in 1994.[146] While there was some curtailment of irrigation deliveries in these two years, the fact that Upper Klamath Lake reached its all-time low level in 1994 indicates that the ESA had not yet significantly changed the Klamath Project's operational priorities.[147]

USBR produced its first annual operations plan for the Klamath Project on April 7, 1995.[148] This brief plan was based on these stated "principles and objectives": meeting the requirements of the ESA, fulfilling federal trust responsibilities to Klamath Basin tribes, providing deliveries of project water (for irrigation), and conserving wetland and wildlife values.[149] Based on a March 1 water supply forecast, USBR

143. *See* Kandra v. United States, 145 F. Supp. 2d 1192, 1197 (D. Or. 2001).

144. U.S. Bureau of Reclamation, Klamath Project, Biological Assessment on Long Term Project Operations (Feb. 28, 1992). In this BA, USBR determined that Klamath Project operations may adversely affect the bald eagle and both species of suckers.

145. *See* U.S. Bureau of Reclamation, Biological Assessment of Klamath Project's Continuing Operations on the Endangered Lost River Sucker and Shortnose Sucker 108 (Feb. 13, 2001) [hereinafter Shortnose Sucker]. The minimum lake level for most years was set at 4139 feet, but in four years out of ten Upper Klamath Lake could fall to 4137 feet. As for the bald eagle, the 1992 BO found that Klamath Project operations would not jeopardize that species. *Id.* at 102.

146. *Id.* at 108.

147. OR. WATER RES. DEP'T, *supra* note 21, at 28.

148. U.S. BUREAU OF RECLAMATION, KLAMATH BASIN AREA OFFICE, KLAMATH PROJECT 1995 OPERATIONS PLAN (Apr. 1995) [hereinafter 1995 OPERATIONS PLAN].

149. *Id.* at 2-3. The 1995 Plan touched off a dispute between the United States Interior Department and the State of Oregon as to whether USBR had the legal authority to manage the project for fishery, tribal, and wildlife refuge purposes. In the spring of 1996, the Oregon Attorney General's Office produced a legal opinion to the effect that USBR had little authority to do anything but deliver Klamath Project water for irrigation. Letter from Stephen E.A. Sanders, *supra* note 82. Federal attorneys eventually responded, stating their legal authority to operate the

"anticipated" that it would be able to maintain "projected" levels in Upper Klamath Lake that were consistent with the preferred levels in the 1992 BO.[150] The plan also included a "proposed" regime of downstream releases, with Klamath River flows at Iron Gate Dam equal to the FERC minimums for every month except April, in which the plan called for flows much higher than FERC.[151] It also stated, "[t]he Plan will provide approximately 500,000 acre-feet for domestic, irrigation, and wildlife uses within the Klamath Project," a full supply for these purposes.[152] All these needs could be satisfied because 1995 was shaping up to be a "very good" water year.[153]

In releasing its 1995 plan, USBR announced that it had already begun work on a long-term Klamath Project Operation Plan (KPOP) that would apply to a full range of water years, from very wet to very dry.[154] This long-term plan was scheduled for completion in March 1996, which would have meant that the 1995 edition would have been the first and last annual operations plan for the Klamath Project.[155] Instead, USBR released a second annual plan—this time a one-pager—in May 1996. It was another wet year, and the 1996 plan called for somewhat higher lake and flow levels than those of the previous year.[156] The 1996 plan also noted that the long-term KPOP was not yet done, but that USBR would continue to develop it as quickly as possible.[157]

USBR's 1997 plan was different from the earlier ones in two key respects. First, it described operations for 1997 under three different scenarios: the current water supply forecast, wetter than the forecast, and drier than the forecast.[158] Second, the 1997 plan made it clear that a drier-

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Klamath Project and their duty to do so in accordance with the Endangered Species Act and the federal trust responsibility to Indian Tribes. Memorandum from David Nawi & Lynn Peterson, Regional Solicitors, U.S. Department of Interior, to various Interior Department officials (Jan. 9, 1997) (on file with author). While the 1996 Sanders letter remains its official position, the state of Oregon has never taken legal action to carry it out.

150. 1995 OPERATIONS PLAN, *supra* note 148, at 3.

151. *Id.* at 13.

152. *Id.* at 12.

153. *Id.* at 3-9.

154. Memorandum from Michael J. Ryan, Area Manager, U.S. Bureau of Reclamation, to Interested Parties (Apr. 7, 1995) (on file with author).

155. 1995 OPERATIONS PLAN, *supra* note 148, at 1.

156. U.S. Bureau of Reclamation, Klamath Project—1996 Operations Advisory (May 7, 1996) (on file with author).

157. *Id.*

158. U.S. BUREAU OF RECLAMATION, KLAMATH PROJECT 1997 ANNUAL OPERATIONS PLAN (May 1997). The plan set forth a range of river and lake levels for each of the three scenarios, but did not call for dropping Upper Klamath Lake below 4139 feet—the preferred level in the 1992 BO—if the year turned out drier than forecast. The plan anticipated adequate water supplies for irrigation and the wildlife refuges based on the current forecast, but noted that if conditions

than-expected year could result in reduced deliveries for irrigation, as well as somewhat lower lake and river levels.[159] In other words, USBR had plainly shifted the risk of a dry year from the fish and tribes to the irrigators and refuges. Another new aspect of the 1997 plan was that it seemed to abandon the idea of a long-term KPOP in favor of further annual plans.[160]

USBR has been developing annual operation plans for the Klamath Project ever since, always waiting for the spring water supply forecast before setting lake and river levels.[161] In 1999, USBR completed its first consultation with the National Marine Fisheries Service regarding the effects of Klamath Project operations on threatened coho salmon, resulting in substantially greater releases from the project to the Klamath River.[162] Also in 1999, USBR took a few preliminary steps to develop a long-term KPOP, but since then there has been little or no progress toward that end.[163]

4. Litigation over the Klamath Project

The first major litigation over Klamath Project operations was *Klamath Water Users Association v. Patterson*, filed by irrigators in response to USBR's 1997 operations plan.[164] The complaint alleged that USBR had violated federal law and breached its contracts with the plaintiffs by adopting a plan that could result in reduced water deliveries for irrigation.[165] After the court denied their injunction request and granted partial summary judgment in favor of USBR on the plaintiffs' NEPA claim in July 1997, most of the case was dismissed without prejudice.[166] Codefendant Pacificorp pursued its counterclaim, however, seeking a declaration that Pacificorp and USBR had acted properly in

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turned out drier, "supply shortages could be expected to occur for Refuges and Klamath Project water contractors."

159. *Id.*

160. *Id.* The 1997 plan began by stating, "Each year, Reclamation issues a Klamath Project annual operations plan," and closed by discussing USBR's schedule for developing a 1998 plan.

161. Kandra v. United States, 145 F. Supp. 2d 1192, 1197 (D. Or. 2001).

162. NAT'L MARINE FISHERIES SERV. SOUTHWEST REGION, BIOLOGICAL OPINION [ON] APR. 1999 THROUGH MAR. 2000 KLAMATH PROJECT OPERATIONS 3 (July 1999).

163. *See* Letter from Karl E. Wirkus, Area Manager, U.S. Bureau of Reclamation, to "Dear Interested Party" (May 11, 1999) (announcing that Reclamation was proceeding with scoping of issues for an Environmental Impact Statement on a long-term operations plan) (on file with author).

164. *See* Klamath Water Users Ass'n v. Patterson, 15 F. Supp. 2d 990, 993 (D. Or. 1998), *aff'd*, 204 F.2d 1206 (9th Cir. 1999).

165. *See id.* at 994-96.

166. *See id.* at 993.

modifying their 1956 contract for operating the Link River Dam on Upper Klamath Lake.[167] Plaintiffs opposed the modification, which essentially authorized Pacificorp to operate the dam in accordance with the 1997 Klamath Project operations plan.[168]

District Judge Michael Hogan upheld the contract modification, holding that the irrigators were not third-party beneficiaries to the underlying contract between Pacificorp and USBR.[169] In rejecting the irrigators' claims, he found that their rights to Klamath Project water arose from their repayment contracts with USBR, not from the 1956 dam operations contract.[170] The court then proceeded to state, "[f]inally, *plaintiffs' rights to water in the basin*, whether as third party beneficiaries to the 1956 contract or under their individual repayment contracts with Reclamation, *are subservient to senior tribal water rights and to subsequent legislative enactments by Congress, such as the Endangered Species Act*."[171] The Ninth Circuit affirmed, further analyzing and clarifying USBR's duties to operate the Klamath Project to protect endangered species and tribal water rights.[172]

A string of wet years in the late 1990s kept things relatively calm, as the Bureau found itself with just enough water to satisfy all demands on the Klamath Project. The basin's luck abruptly ran out, however, because the weather turned very dry in the spring and summer of 2000.[173] By August it was clear that Upper Klamath Lake would have too little water

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167. *See id.* USBR entered into an agreement in 1917 with Pacificorp's predecessor, Copco, whereby Copco would construct the Link River Dam at the outlet to Upper Klamath Lake and convey the dam to the United States to become part of the Klamath Project. *Id.* at 992. Copco received the right to operate the dam for fifty years, and in 1956 this contract was renewed for another fifty years. *Id.* The 1956 contract imposed certain terms and conditions on Copco's operation of Link River Dam that were arguably intended to benefit Klamath Project irrigators. *See id.* After adopting its 1997 operations plan, USBR reached agreement with Pacificorp on a temporary modification to the 1956 contract—a modification that the irrigators saw as putting their water supply at risk for the benefit of Klamath River flows below the Project. *Id.* at 993. The reported decisions in *Klamath Water Users Ass'n* addressed the legality of this modification to the 1956 contract, rather than USBR's 1997 operations plan. *See id.* at 991-93.

168. *Id.*

169. *Id.*

170. *Id.*

171. *Id.* (citing O'Neill v. United States, 50 F.3d 677, 680-81 (9th Cir. 1995) (emphasis added)).

172. Klamath Water Users Protective Ass'n v. Patterson, 204 F.3d 1206, 1213-14 (9th Cir. 1999). In response to plaintiff-appellants' request for rehearing on the water right issues, the court added a footnote to its opinion on January 28, 2000, clarifying that the state of Oregon's ongoing Klamath Adjudication would provide a final determination of water rights in the basin, "at least within the State of Oregon." *Id.* at 1214 n.3.

173. Langell Valley Irrigation Dist. v. Babbitt, No. 00-6265-HO, slip op. at 3-6 (D. Or. Aug. 31, 2000).

to meet all the needs—irrigation, lake levels, and downstream flows.[174] Reservoirs on the Lost River (eastern) side of the Klamath Project, however, had a surplus of water for the year.[175] When USBR announced plans to release water from these reservoirs to benefit the west side of the Klamath Project, Lost River irrigators filed the case of *Langell Valley Irrigation District v. Babbitt*, seeking a preliminary injunction to keep the water in storage.[176]

District Judge Hogan denied this request, turning aside a wide range of arguments by the plaintiff irrigators.[177] The court found that plaintiffs were not likely to prevail in their arguments that USBR had violated their repayment contracts, state water law, or the federal environmental and reclamation laws governing the operation of the Klamath Project.[178] The court also found the balance of hardships tipped away from plaintiffs since they could show no harm from the releases, whereas both farmers and wildlife elsewhere on the Klamath Project might suffer if the releases were not made.[179] Perhaps most significantly, the court stated:

> Plaintiffs argue that the purpose of the Klamath Project, pursuant to the Reclamation Act, is irrigation and reclamation. Plaintiffs contend that the purpose of the Bureau's releases of water from Clear Lake into Tule Lake is primarily to benefit fish and wildlife and is thus not permitted under the Project's authorizing legislation. However, the Ninth Circuit has already held that the ESA applies to agency action pursuant to the Reclamation Act. *See, e.g.*, *Peterson*, 204 F.3d at 1213 (Because Reclamation retains authority to manage the Dam, and because it remains the owner in fee simple of the Dam, it has responsibilities under the ESA as a federal agency. These responsibilities include taking control of the Dam when necessary to meet the requirements of the ESA, requirements that override the water rights of the Irrigators).[180]

Thus, by the end of 2000, it seemed quite clear that Klamath Project farmers could not count on the federal courts to protect their irrigation water supplies. As very dry conditions persisted into the winter, it also became clear that the weather would do them no favors. And any hope

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174. *See id.*
175. *See id.*
176. *Id.*
177. *Id.* at 9-21.
178. *Id.* at 9-20.
179. *Id.* at 20-21.
180. *Id.* at 15-16. The quote appears as it did in the slip opinion; however, rather than "Peterson," the court was citing *Klamath Water Users Protective Association v. Patterson*, 204 F.3d 1206, 1213 (9th Cir. 1999).

that the incoming Bush Administration would rescue them for the upcoming irrigation season would be very short-lived.

B. The Events of 2001

By early 2001, all the elements of a serious Klamath Basin water conflict were in place. All that was needed for a full-blown crisis was a serious drought.

In fact, 2001 was one of the driest years in the Klamath Basin's recorded history, with automated weather sites recording only thirty-four percent of normal precipitation.[181] By early April, when Reclamation announced its operating plan for the year, forecasted inflows to Upper Klamath Lake for April 1 through September 30 were only 108,000 acre-feet, the lowest on record.[182]

1. New Consultations

Early in the year, USBR delivered new biological assessments to both NMFS and USFWS, each of which concluded that ongoing Klamath Project operations were likely to adversely affect listed fish species.[183] USBR reinitiated consultation in part because of evidence that ongoing Klamath Project operations were harming fish populations; this evidence included serious die-offs of endangered suckers in Upper Klamath Lake in 1995, 1996, and 1997, and major salmon die-offs in the Klamath River in 1994, 1995, 1997, and 2000.[184] Both of the new BAs found that ongoing Project operations were likely to adversely affect protected fish and their habitat in numerous ways.[185]

USFWS issued its draft Biological Opinion on March 13, 2001, recommending a series of minimum levels in Upper Klamath Lake to protect habitat for the Lost River and shortnose suckers; the minimum lake levels varied by month, with a low of 4140 feet above sea level in September.[186] NMFS also produced a draft BO on March 19,

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181. Milstein, *supra* note 50, at B8.

182. *See* Kandra v. United States, 145 F. Supp. 2d 1192, 1198 (D. Or. 2001).

183. *Id.* USBR delivered its BA on coho salmon to NMFS on January 22, 2001, and its BA on the two sucker species to USFWS on March 13, 2001. *Id.*

184. Shortnose Sucker, *supra* note 145, at 32-37; U.S. Bureau of Reclamation, Biological Assessment of the Klamath Project's Continuing Operations on Southern Oregon/Northern California ESU Coho Salmon and Critical Habitat for Southern Oregon/Northern California ESU Coho Salmon, at 36-37 (Jan. 22, 2001) [hereinafter BA on Coho].

185. BA on Coho, *supra* note 184, at 45-46;Shortnose Sucker, *supra* note 145, at 73-82, 89.

186. *See Kandra*, 145 F. Supp. 2d at 1198.

recommending a range of minimum flows in the Klamath River below Iron Gate Dam to protect coho salmon.[187]

USBR then informed the two Services that there would be too little water in 2001 to meet both the recommended lake levels and river levels in the draft BOs.[188] Federal scientists met and settled on compromise levels for the coming dry year.[189] Both NMFS and USFWS would soon release final BOs with minimum river and lake levels lower than those recommended in the drafts.[190] Just before the final BOs were released, however, a federal court in California issued an order that clearly established USBR's duty to comply with the ESA before delivering any Klamath Project water for irrigation.[191]

2. The *Pacific Coast* Injunction

On April 3, Judge Saundra Brown Armstrong of the U.S. District Court for the Northern District of California granted summary judgment for the plaintiffs in *Pacific Coast Federation of Fishermen's Associations v. United States Bureau of Reclamation*.[192] The court found that USBR had violated the procedural mandates of the ESA in operating the Klamath Project, and issued an injunction that would effectively preclude USBR from delivering any irrigation water until it completed consultation with NMFS.[193]

The court found that USBR had never completed consultation on its 2000 Klamath Project operating plan, even though it knew that formal consultation was required by the ESA.[194] The court rejected USBR's argument that it had met its ESA responsibilities through an informal

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187. *See id.*

188. *Id.*

189. Representatives of USFWS, NMFS, the Bureau of Indian Affairs, and the Karuk, Klamath, and Yurok tribes met on March 28 and tentatively agreed on water management for the 2001 water year. USFWS 2001 BO, *supra* note 79, § III, pt. 2, at 186. It was also reported that Vice President Dick Cheney had called federal scientists into his office in a (partially successful) effort to free up some water for irrigation. *See* Michael Milstein, *Crisis Smother Economy*, OREGONIAN, May 7, 2001, at A1, A12.

190. *See Kandra*, 145 F. Supp. 2d, at 1198.

191. Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 138 F. Supp. 2d 1228, 1242-47 (N.D. Cal. 2001).

192. *Id.* at 1250-51.

193. *Id.*

194. *Id.* at 1243. The court found specifically that USBR had violated section 7(a)(2) of the ESA by implementing its 2000 Operations Plan, and operating Klamath Project pursuant to this plan for an entire year, (1) without first completing a biological assessment evaluating the plan's potential effects on threatened and endangered species and their critical habitats in the action area, and (2) without ever initiating consultation concerning the plan, even though it knew that consultation was required and that formal consultation, in particular, was warranted.

consultation with NMFS, and sharply criticized USBR's failure to take the steps required by law:[195]

> [T]he Bureau's "informal consultations" produced no final conclusion concerning the likely impact of its 2000 Operations Plan on the coho salmon. This omission had the affect [sic] of placing the plan, and project operations, in a kind of administrative limbo. Because the Bureau did not make a final determination, the NMFS could not decide whether to concur and, consequently, formal consultation never began. Because formal consultation never began, the Bureau was not forced to confront a possible NMFS determination that its annual plan jeopardized the continued existence of the coho salmon or its critical habitat. . . . This failure to reach a final conclusion easily might be construed as a deliberate (and successful) effort to avoid formal consultation and a possible "jeopardy" finding, especially given the Bureau's subsequent admission that formal consultation was warranted.[196]

The court then granted plaintiff's request for an injunction to ensure that USBR's ongoing Klamath Project operations would not jeopardize downstream populations of coho salmon.[197] The injunction required USBR to provide specific flows to protect salmon in the Klamath River before delivering any water for irrigation.[198]

3. The 2001 Operations Plan

Three days after the *Pacific Coast* injunction, USBR announced its annual operations plan for the Klamath Project in 2001. At the same time, both NMFS and USFWS announced their final BOs on the 2001 Plan.[199] The new plan's bottom line: most irrigators would receive no water from the Klamath Project in 2001, while farmers on the Lost River side would get 70,000 acre-feet.[200] The basin's national wildlife refuges, too, would get no water from the Klamath Project, even though the USFWS BO called for a minimum delivery of 32,255 acre-feet to the

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Id. at 1246-47.

196. *Id.* at 1246.

197. *Id.* at 1248-50.

198. *Id.*

199. *See* Kandra v. United States, 145 F. Supp. 2d 1192, 1198-99 (D. Or. 2001).

200. U.S. BUREAU OF RECLAMATION, KLAMATH PROJECT 2001 OPERATIONS PLAN 3 (Apr. 6, 2001). "Minimum UKL [Upper Klamath Lake] levels and Klamath River flows have been specified as a result of ESA consultation on listed species . . . . As a result, current conditions indicate water deliveries to farms and refuges within the Project service area will be severely limited." *Id.*

Lower Klamath National Wildlife Refuge to avoid harm to threatened bald eagles.[201]

The 2001 BO for suckers established a minimum level of 4140 feet for Upper Klamath Lake during normal years, but allowed lower levels during years when the lake had had too little water to meet that level and still provide ESA flows for salmon in the Klamath River.[202] Based on that dry-year exception in the BO, the 2001 plan allowed the lake to fall to 4139 feet in September.[203] The plan also established Klamath River flow levels of 1700 cubic feet per second (cfs) from April through June 30 (except for 2100 cfs from June 1-15), and 1000 cfs from July through September.[204] These levels were very similar to those established in recent Klamath Project annual operation plans, except that the 2001 plan set higher flow levels and lower lake levels for early summer.[205]

The 2001 operations plan stunned and outraged many in the Klamath Basin, who attacked both the government's decision and the science underlying it.[206] Many elected officials joined in the criticism, and even Oregon's relatively fish-friendly elected officials, such as Governor John Kitzhaber and Senator Ron Wyden, called for rewriting

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201. *Id.* The USFWS BO called for a minimum delivery of 32,255 acre-feet to the Lower Klamath National Wildlife Refuge, provided that "water is available in excess of that required for ESA Needs in Upper Klamath Lake, Tule Lake and the Klamath River." The BO indicated that this minimum delivery to the refuge was "nondiscretionary." USFWS 2001 BO, *supra* note 79, § III, pt. 1, at 34.

202. *Id.* § III, pt. 2, at 147-48. The BO describes a multiagency coordination procedure for establishing lake and river levels during years of very low water.

203. U.S. BUREAU OF RECLAMATION, KLAMATH PROJECT 2001 ANNUAL OPERATIONS PLAN at 4 (Apr. 6, 2001).

204. *Id.*

205. Compare the following values from the 2001, 2000, and 1998 Klamath Project annual plans:

MINIMUM LEVEL	2001 PLAN	2000PLAN	1998 PLAN
Upper Klamath Lake, May 31 (feet)	4141.8	4142.6	4142.6
Upper Klamath Lake, July 15 (feet)	4140.0	4141.6	4141.6
Upper Klamath Lake, Sept. 30 (feet)	4139.0	4139.0	4139.0
Klamath River, May 16-31 (cfs)	1700	1750	1800
Klamath River, June 1-15 (cfs)	2100	1500	1400
Klamath River, June 16-30 (cfs)	1700	1000	1400
Klamath River, July (cfs)	1000	1000	900
Klamath River, Aug. (cfs)	1000	1000	1000

206. Lee Juillerat, *Grief, Fury Assail Governor*, KLAMATH FALLS HERALD & NEWS, Apr. 13, 2001, *available at* http://www.heraldandnews.com (last visited Mar. 14, 2002).

the ESA.[207] Within days, Klamath Project irrigators sued the United States to block the 2001 operating plan.[208]

4. The *Kandra* Decision

In *Kandra v. United States*, the irrigators argued that the 2001 plan violated their contract rights, and also challenged its legal and scientific bases under the Administrative Procedures Act, alleging violations of both the National Environmental Policy Act (NEPA) and the ESA.[209] They sought a preliminary injunction that would require USBR to make "historic" irrigation deliveries, or at least to provide 262,000 acre-feet of Upper Klamath Lake water for irrigation.[210] After three days of court-supervised mediation yielded no results, Judge Ann Aiken heard oral argument on April 27.

Judge Aiken denied the irrigators' injunction request and let stand USBR's 2001 plan, largely because she did not believe the plaintiffs had a strong case on the merits.[211] She found that they were unlikely to prevail on their claim that USBR had breached its water supply contracts with the irrigators.[212] She also found that their NEPA claims could not support the requested injunction, and rejected their ESA-based challenge because they failed to demonstrate flaws in the scientific basis for the 2001 Plan.[213]

Perhaps most remarkably, Judge Aiken refused to issue an injunction for a second reason: she found that the balance of hardships did not necessarily favor the irrigators.[214] She wrote, "There is no question that farmers who rely on irrigation water and their communities will suffer severe economic hardship if the 2001 Plan is implemented."[215] But she also recognized that fishermen and fishing communities, as well as Native American Tribes, would face hardship if all the water went to

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207. *Id.*; *see also* Kehn Gibson, *We Must Re-Write the ESA*, KLAMATH FALL HERALD & NEWS, Apr. 13, 2001, at 1.

208. Kandra v. United States, 145 F. Supp. 2d 1192, 1195 (D. Or. 2001). The City of Klamath Falls, Klamath County, Oregon and Modoc County, California, intervened on the side of the plaintiffs. *Id.* The Klamath and Yurok Tribes, several conservation groups, and a commercial fishing organization intervened on the defendants' side. *Id.*

209. *Id.* at 1196.

210. *Id.* According to the court, this latter remedy would have drawn down the lake to an elevation of 4138 feet by the end of September, allocating roughly half of lake storage and inflow to the irrigators.

211. *Id.* at 1211.

212. *Id.* at 1201-02.

213. *Id.* at 1204-10.

214. *See id.* at 1200.

215. *Id.*

farmers.[216] The court also relied on the ESA's strong national policy of protecting species from extinction.[217]

Thus, a water crisis that had been building for many years was triggered by the events of four months in early 2001. This series of events created a serious political and public backlash. Senator Gordon Smith (R-Or.) nearly succeeded in convincing the full U.S. Senate to roll back ESA protection for the Klamath Basin to pre-2001 levels.[218] Interior Secretary Gail Norton, in an effort to placate angry crowds in the Klamath Basin, announced that she would release at least 70,000 acre-feet of water from Upper Klamath Lake for irrigation of the Klamath Project.[219] Conservation groups then sued USBR over the failure to deliver any water for bald eagles on the wildlife refuges as required by the 2001 BO, which resulted in a series of agreements through which USBR provided water to meet the refuges' minimum needs.[220] The Klamath Project irrigators announced that they would file their own lawsuit in the court of federal claims, alleging that the federal government had effected a "taking" of their property by denying them water in 2001, and seeking up to $1 billion in compensation.[221]

IV. LESSONS ON THE ESA AND FEDERAL WATER PROJECTS

Many people were shocked and outraged that some farmers got no water from the Klamath Project in 2001, largely because of the ESA. Those who may be concerned about "the next Klamath," however, should recognize the extraordinary circumstances of this basin. Few federal water projects must be operated to provide adequate lake levels for one set of endangered species, adequate downstream flows for a second species, and adequate marsh habitat for a third set of protected species, all in addition to the water needs of traditional beneficiaries. Moreover,

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216. *See id.* at 1201.

217. *See id.*

218. *See* Tom Detzel, *Senator Loses Effort to Release Water for Parched Farms*, OREGONIAN, July 13, 2001, at A1.

219. Deborah Schoch, *Norton to Free Some Klamath Water*, L.A. TIMES, July 25, 2001, at A10.

220. Michael Milstein, *Groups Sue for Klamath Water*, OREGONIAN, Aug. 8, 2001, at A1, A9. Because USBR took steps to meet the refuges' minimum water needs in the fall of 2001, there have been no proceedings since the filing of *Oregon Natural Resources Council v. Keys*, No. 01-6250-AA (D. Or. 2001).

221. *See* Kehn Gibson, *Water Users to File Lawsuit*, KLAMATH FALLS HERALD & NEWS, Aug. 24, 2001, at 1. The Klamath Project irrigators are hoping to prevail in their case, just as California State Water Project irrigators did in the case of *Tulare Lake Basin Water Storage District v. United States*, 49 Fed. Cl. 313 (2001). Unlike the *Tulare* case, however, the Klamath plaintiffs have contracts that limit the federal government's liability for failure to deliver a full water supply. *See* O'Neill v. United States, 50 F.3d 677, 680 (9th Cir. 1995).

2001 saw not only new ESA requirements for all three areas, but also one of the worst droughts in the basin's history. Thus, the ESA will rarely affect other water projects as dramatically as it did the Klamath in 2001.

Still, this year's events in the Klamath Basin provide lessons on how the ESA may affect other federal water projects. The *Pacific Coast* and *Kandra* cases, while consistent with earlier Ninth Circuit case law, have clarified what USBR must do to comply with the ESA in operating its projects.[222] If followed by other courts, these cases may have significant implications for federal projects throughout the West.[223]

A. Duty to Consult on Ongoing Project Operations

The *Pacific Coast* decision is the clearest statement from a federal court on the duty of USBR to consult on the ongoing operation of any water project that may adversely affect species protected by the ESA.[224] In holding that USBR violated the law by failing to consult on its annual operating plan for the Klamath Project, the court relied on ESA implementing regulations and case law taking a broad view of the type of agency action subject to consultation.[225]

The court made it clear that USBR cannot be excused from consulting simply by failing to complete a BA on project operations.[226] The court also rejected an argument that the *Pacific Coast* case was not ripe for review because USBR had initiated, but not completed, consultation on a new operations plan it was developing for 2001.[227] Even though USBR had essentially completed its 2000 operations, and

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222. *See generally* Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 138 F. Supp. 2d 1228 (N.D. Cal. 2001); *Kandra*, 145 F. Supp. 2d at 1192.

223. *Kandra* was dismissed in the fall of 2001. The *Pacific Coast* case has been appealed to the Ninth Circuit although it is not clear that the appellants intend to proceed with the case. Telephone Interview with Todd True, Attorney, Earthjustice Legal Defense Fund, Seattle Office (Jan. 9, 2002).

224. *See Pacific Coast*, 138 F. Supp. 2d at 1240-47.

225. *Id.*

226. *Id.* at 1243. "Such a result would render meaningless the consultation requirement and would be completely at odds with the clear mandate of the ESA. . . ."

227. *Id.* at 1246-47.

had prepared a BA for its 2001 operations,[228] the court still found a substantial ESA violation that warranted an injunction.[229]

The court also rejected USBR's contention that it had complied with the ESA by "informal consultation" with NMFS on the 2000 Plan.[230] Noting that the applicable regulations define informal consultation as "an optional process . . . designed to assist the Federal agency in determining whether formal consultation . . . is required," the court found that USBR had not actually engaged in this process, which would not have been legally sufficient in any event.[231] Since USBR had already determined that formal consultation was required, it was obligated to move forward with a BA on the 2000 plan.[232]

The idea that USBR might have to consult on its ongoing project operations might have come as a surprise to many observers. After all, the Klamath Project, like almost every other USBR project, was completed many years before the ESA became law. There were no new irrigation contracts, no new facilities, and no other fundamental changes at a project that had served agriculture almost exclusively for ninety years. The Klamath Project cases of 2001, however, should not have shocked anyone familiar with the Ninth Circuit's recent decisions in related matters—especially *Pacific Rivers Council v. Thomas* (enjoining ongoing Forest Service activities on two national forests pending completion of consultation) and National Resources Defense Council *v. Houston* (voiding renewal of irrigators' water service contracts, which USBR signed before completing consultation).[233]

B. Deliveries Enjoined Until Consultation Complete

The most dramatic aspect of the *Pacific Coast* decision was that it essentially blocked USBR from delivering Klamath Project water for

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228. *Id.* at 1249 n.18. The Bureau represented that it would operate the project in accordance with minimum flow and lake levels presented in the BA, but the court found that these levels were indefinite. *Id.* Even a more specific BA plan would not have provided a sufficient basis for operating the project in 2001, however, because ESA section 7(d) precludes any "irreversible and irretrievable commitment of resources" pending the completion of consultation, and irrigation water deliveries from the Klamath Project would violate that rule. *Id.* at 1249 n.19.

229. "While the Bureau finally did initiate formal consultation, that consultation is not as yet complete and, given the Bureau's past performance, there is no guarantee that it will be completed as promptly as the Act and the regulations require." *Id.* at 1248.

230. *Id.* at 1244.

231. *Id.* (citing 50 C.F.R. § 402.13(a)).

232. *Id.* at 1244-46.

233. Pac. Rivers Council v. Thomas, 30 F.3d 1050 (9th Cir. 1994); Natural Res. Def. Council v. Houston, 146 F.3d 1118 (9th Cir. 1998).

irrigation until it completed consultation on the 2001 operating plan. The court held that the ESA's procedural requirements must be followed in order to ensure substantive compliance with the strong national policy of protecting species threatened with extinction.[234]

The court specifically rejected USBR's argument that plaintiffs were not entitled to an injunction because they had failed to demonstrate any injury or harm to the coho caused by implementation of the 2000 operating plan.[235] The court also brushed aside the arguments of Klamath Project irrigators (who had intervened in the case) with a single footnote.[236]

Judge Armstrong noted that ESA section 7 imposes "a significant constraint on the court's equity jurisdiction," and thus did not inquire into the balance of hardships.[237] The *Kandra* court did consider this issue in the context of an injunction request by irrigators and found strong arguments on both sides, as farmers and fishing families each have a strong economic interest in water.[238]

Rather than enjoining USBR from operating the project at all, Judge Armstrong based her order on the Klamath River levels specified in a report known as "Hardy Phase I" which was generally conceded to represent the best available science on coho flow needs at that time.[239] The court enjoined USBR from delivering irrigation water from the project whenever Klamath River flows fell below the levels recommended in Hardy Phase I, until such time as consultation was completed on the 2001 operating plan.[240]

C. Requirements for Consultation

Within days of the *Pacific Coast* injunction, USBR moved to have it lifted based on NMFS' final BO and the 2001 Klamath Project operating

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234. *Pacific Coast*, 138 F. Supp 2d at 1248 (relying on Thomas v. Peterson, 753 F.2d 754 (1985)).

235. "It is not the responsibility of the plaintiffs to prove, nor the function of the courts to judge, the effect of a proposed action on an endangered species when proper procedures have not been followed." *Id.* at 1248 n.17, (quoting *Thomas*, 753 F.2d at 764-65).

236. *Id.* at 1250 n.20. Regarding the intervenors' argument "that the rights of irrigators should override concerns protected by the ESA," the court noted that the Ninth Circuit had already determined that ESA requirements "override the water rights of the Irrigators" (citing Klamath Water Users Protective Ass'n v. Patterson, 204 F.3d, 1206 (9th Cir. 1999), *cert. denied*, 538 U.S. 812 (2000)).

237. *Id.* at 1247-48 (citing Sierra Club v. Marsh, 816 F.2d 1376, 1383 (9th Cir. 1987)).

238. Kandra v. United States, 145 F. Supp. 2d 1192, 1200-01 (D. Or. 2001).

239. *Pacific Coast*, 138 F. Supp. 2d. at 1249-50. The opinion contains a fairly extensive discussion of the various river levels that were considered for the Klamath Project 2000 operating plan. *Id.* at 1232-37.

240. *Id.* at 1250.

plan of April 6.[241] The court refused to lift the injunction on that basis, however, noting that the operating plan presented to the court was still clearly marked DRAFT, and questioning whether this plan had actually been subject to NMFS consultation.[242]

The court went on to clarify what was required of USBR to comply with the ESA: finalize a concrete plan for 2001 Klamath Project operations, formally consult with NMFS on that plan, and obtain a BO on that plan.[243] The injunction could be lifted if NMFS found that the plan would not likely jeopardize the continued existence of coho.[244] If the BO found jeopardy, however, USBR would have to notify NMFS of whether it intended to proceed with the plan, and if so, whether it would implement any of the BO's reasonable and prudent alternatives.[245]

On May 3, Judge Armstrong lifted the injunction based on the following showing by USBR:

> (1) that the Bureau of Reclamation (Bureau) has completed formal consultation on its 2001 Annual Operations Plan for the Klamath Project (2001 Plan) with respect to the effects of Project operations on the federally-listed coho salmon; (2) that the National Marine Fisheries Service (NMFS) concurs that consultation on the 2001 Plan has been completed and has issued a biological opinion covering the 2001 Plan which contains a reasonable and prudent alternative (RPA) regarding Klamath River flows between April and September of this year that will avoid jeopardy to the species; and (3) that the Bureau has provided written notice to NMFS that it has adopted, and will implement, the RPA during this period.[246]

Both *Pacific Coast* and *Kandra* addressed the effect of ESA section 7(d), which forbids federal agencies from making "any irreversible or irretrievable commitment of resources" while consultation is pending.[247] In *Pacific Coast*, the court found that plaintiffs' claims under section 7(d) were not ripe, because USBR had not actually begun consultation—a threshold for section 7(d)—on a long-term operations plan.[248] Thus, the

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241. *See Pacific Coast*, No. C00-01955 SBA (N.D. Cal. Apr. 17, 2001) (order denying injunction).

242. *Id.* at 2-3.

243. *Id.* at 3-5.

244. *Id.* at 4.

245. *Id.* at 3-5. The court noted that while USBR is technically free to disregard the BO, "an agency disregards a jeopardy finding 'at its own peril (and that of its employees), for "any person" who knowingly "takes" an endangered threatened species is subject to substantial civil and criminal penalties, including imprisonment.'" *Id.* at 4 (quoting Bennett v. Spear, 520 U.S. 154, 170 (1997)).

246. *Pacific Coast*, No. 00-1955 SBA (N.D. Cal. May 3, 2001) (order lifting injunction).

247. 16 U.S.C. § 1536(d) (2000).

248. The court's rationale was that USBR was still in the process of developing a concrete long-term operations plan for the Klamath Project, and because this plan was still a work in

court did not address the issue of whether USBR's irrigation water deliveries in 2000 were an "irreversible or irretrievable commitment of resources" that would violate section 7(d). *Kandra*, however, states that section 7(d) would prohibit irrigation water deliveries pending consultation.[249] The court cited section 7(d) as one reason for denying the irrigators' request for water from the Klamath Project, stating that the water would be "irretrievable" for protected species once delivered for that purpose.[250]

D. ESA Compliance Comes First for Water Projects

The *Kandra* decision clearly indicates that USBR, which traditionally has managed its projects primarily (if not exclusively) for irrigation, now must put ESA compliance first. The court noted that ESA obligations take priority over the primary missions of federal agencies.[251]

The *Kandra* court rejected a contract claim from two of the plaintiffs, which were irrigation districts that have long received Klamath Project water under contracts with USBR.[252] These districts argued that USBR breached these contracts by using project water for purposes other than irrigation, but the court found that this issue had been decided against the farmers in an earlier case: "[A]s recognized by this court and the Ninth Circuit, plaintiffs' contract rights to irrigation water are subservient to ESA and tribal trust requirements. *Patterson*, 204 F.3d at 1214."[253]

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progress, USBR could not be said to have begun consulting on it. *Pacific Coast*, 138 F. Supp. 2d at 1250-51.

249. Kandra v. United States, 145 F. Supp. 2d 1192, 1210 (D. Or. 2001). In this regard, *Kandra* followed *National Resources Defense Council v. Houston*, 146 F.3d 1118, 1130 (9th Cir. 1998).

250. The court noted that if it found an ESA violation, the appropriate relief would be to set aside the final BOs. At that point, USBR would have to reinitiate consultation with both NMFS and USFWS, and during that process it could not take any action contrary to § 7(d). *Kandra*, 145 F. Supp. 2d at 1210.

251. *Id.* at 1207 (quoting Tenn. Valley Auth. v. Hill, 437 U.S. 153, 185 (1978)).

252. *Id.* at 1201.

253. *Id.* In fact, the Ninth Circuit's decision in *Patterson* stated that USBR's responsibilities under the ESA "override" the rights of the irrigators. Klamath Water Users Protective Ass'n v. Patterson, 204 F.3d 1206, 1213 (9th Cir. 1999). Also, the USBR's duties include fulfilling tribal rights that "take precedence" over those of the irrigators. *Patterson*, 204 F.3d at 1214. It was at the district court level in *Patterson* that Judge Michael Hogan that had stated that the irrigators' rights are "subservient" to senior tribal water rights and the ESA. Klamath Water Users Ass'n v. Patterson, 15 F. Supp. 2d 990, 996 (D. Or. 1998). The reader is left to speculate as to any potential differences in meaning among these three terms.

The *Kandra* plaintiffs also argued unsuccessfully on two grounds against the BO "reasonable and prudent alternatives" (RPAs) adopted in the 2001 plan.[254] First, the plaintiffs contended that the RPAs were illegal because they prevented the Klamath Project from delivering water for irrigation, its primary purpose under the Reclamation Act.[255] Second, they argued that the RPAs were not "economically feasible."[256] In rejecting these arguments, the court noted that ESA implementing regulations define RPA as an alternative that is "consistent with the purposes of the action" and "economically and technically feasible," but read this language to require only that the RPA be feasible for the agency to implement.[257] The court went on to state that USBR's "legal duty to operate the project consistent with its ESA and tribal trust obligations does not render the RPAs inconsistent with the project's purpose."[258]

Four recent cases—*Patterson*, *Langell Valley*, *Pacific Coast*, and *Kandra*—have all acknowledged that the ESA governs the operation of the Klamath Project.[259] Here again, these decisions have been very consistent with earlier Ninth Circuit case law, such as *O'Neill v. United States*[260] (upholding USBR's refusal to deliver a full water supply to irrigators during drought, based on ESA and other laws) and *Natural Resources Defense Council v. Houston*[261] (requiring ESA compliance prior to renewal of irrigators' water service contracts).

E. No Delays Based on NEPA

The *Kandra* plaintiffs also argued that USBR was required to prepare an Environmental Impact Statement before implementing the 2001 Plan.[262] They contended that the 2001 Plan changed the priorities for Klamath Project water, and was therefore a "major federal action" triggering the requirements of NEPA.[263] The court acknowledged that NEPA may apply if an ongoing project undergoes changes which

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254. *Kandra*, 145 F. Supp. 2d at 1207-08.
255. *Id.* at 1207.
256. *Id.*
257. *Id.*
258. *Id.*
259. *See generally* Pac. Coast Fed'n of Fishermen's Ass'ns v. United States Bureau of Reclamation, 138 F. Supp. 2d 1228 (N.D. Cal. 2001); Langell Valley Irrigation Dist. v. Babbitt, No. 00-6265-40, slip op. (D. Or. Aug. 31, 2000); *see also Kandra*, 145 F. Supp. 2d at 1192; Klamath Water Users Protective Ass'n v. Patterson, 15 F. Supp. 2d 990, 990 (D. Or. 1998).
260. 50 F.3d 677, 689 (9th Cir. 1995).
261. 146 F.3d 1118 (9th Cir. 1998).
262. *Kandra*, 145 F. Supp. 2d at 1202.
263. *See id.* at 1204.

themselves amount to major federal actions,[264] but rejected plaintiffs' claim, just as the Ninth Circuit had rejected conservationists' efforts in the mid-1990s to force a NEPA review of Klamath Project operations.[265]

Here again, the court noted that USBR has a legal duty to operate the project in compliance with the ESA, and to provide water in satisfaction of senior tribal water rights.[266] "As such, Reclamation's 'change in operation' is mandated by law, and the requirements of NEPA do not apply."[267]

The court had a harder time rejecting the plaintiffs' argument that an EIS was required for implementation of the recommended RPAs, which were "unprecedented and [would] undoubtedly have an effect on the environment."[268] The court recognized, however, that it would be impossible for USBR to prepare a full EIS on an annual operating plan, because water supply forecasts do not begin until about two months before the irrigation season.[269] The court did not believe an EIS was appropriate to "the implementation of a short-term annual water plan prepared under drought conditions."[270]

The court strongly chided USBR, however, for failing to proceed with a long-term plan for the Klamath Project or an EIS on such a plan:

> I am disturbed, however, that Reclamation has failed to complete an EIS analyzing the effects and proposed alternatives of a long-term plan. Reclamation represented in past proceedings that such a plan would be completed long before 2001. Yet, no plan exists. In essence, Reclamation is avoiding its duties under NEPA by relying on annual plans to which NEPA cannot realistically apply. During oral argument, government counsel represented that the long-term EIS is scheduled to be completed in February 2002. However, it awaits the completion of an updated NMFS BiOp, slated to be completed in June 2001. The court intends to monitor Reclamation's compliance with its representations. This dispute highlights

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264. *Id.* (citing Upper Snake River Chapter of Trout Unlimited v. Hodel, 921 F.2d 232, 234-35 (9th Cir. 1990)).

265. *See* Oregon Natural Res. Council v. Bureau of Reclamation, 37 F.3d 1414, 1417 (9th Cir. 1994), *withdrawn by* 49 F.3d 1441 (9th Cir. 1995), and *superceded by* 52 F.3d 334 (9th Cir. 1995).

266. *Kandra*, 145 F. Supp. 2d at 1204.

267. *Id.* (citing Nat'l Wildlife Fed'n v. Espy, 45 F.3d 1337, 1343 (9th Cir. 1995)).

268. *Id.* at 1205.

269. *Id.*

270. The court thus characterized the 2001 Plan in distinguishing *Westlands Water District v. United States*, 850 F. Supp. 1388, 1416 (E.D. Cal. 1994), in which the court ordered an EIS before "implementation of a new statutory scheme which reduced the amount of water available to irrigators by fifty percent." *Id.* at 1205.

> the need for long-term planning to minimize the effects of future dry years.[271]

Indeed, USBR's failure to develop a long-term operations plan and complete consultations on that plan with NMFS and USFWS seems like a major mistake. After announcing plans to develop a long-term KPOP in 1995, USBR never proceeded, instead choosing to muddle through on a year-by-year basis, hoping for enough water to get by. Had USBR completed this plan in 1997, when it first shifted the risk of water shortages to the irrigators, or even 1999, when it conducted scoping, then the crisis of 2001 might not have hit so hard. By stating a hard but obvious fact—Klamath Project farms and refuges would get very little water in a dry year—a long-term plan might have spurred the development of programs to reduce irrigation demands and secure a firm supply for the refuges. Advance planning might not have "made more water" for 2001, but it could have reduced the human and ecological impacts of the crisis, as well as the public furor.

IV. CONCLUSION—WAS IT FAIR?

What happened in the Klamath Basin last year was clearly much more complex than "farmers vs. suckers." The Klamath crisis became a national phenomenon, however, because of a perception that it simply was not fair to deny water to farmers for the sake of some fish, even if it was endangered. That message—voiced by many basin residents, shouted by politicians, featured in news reports—has been repeated over and over, even after Congress provided $20 million in emergency assistance for Klamath Basin farmers.[272] The following points have received far less attention, but they merit some consideration.

First, the Klamath Project farmers are not the only group in the basin with a strong equity argument based on lost livelihoods. The Native American tribes have been desperately poor for generations, largely deprived of their traditional sustenance and lifestyle. Coastal fishing families and communities have also been hit hard in recent years by the crash of salmon populations. Both these groups stand to gain from changes in Klamath Basin water management that would improve both quantity and quality, with a goal of rebuilding fish populations. To frame the issue simply as "farmers vs. suckers" is to ignore the real human costs of traditional water management in the basin, and the real

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271. *Id.* at 1206.

272. Michael Milstein, *Farmers in Klamath Basin Rally for Water Guarantees*, OREGONIAN, Jan. 23, 2002, at A21.

human benefits that could flow from restoring aquatic ecosystems. To say that the "solution" is simply rolling back the ESA is implicitly to argue, not just that people are more important than fish, but that farmers are more important than other people.

Second, irrigators have been the primary users of Klamath Basin water for nearly a century even though they do not hold the highest legal claim to the water. The tribes, by right, should have been getting the water first, as their nineteenth-century water rights take priority over the 1905 right of the Klamath Project. Even after *Adair* confirmed the Klamath Tribes' water rights in 1983, nothing really changed. Even after the Klamath River salmon fishery collapsed and Congress passed the Klamath River Basin Fishery Resources Restoration Act, nothing really changed in terms of water management. From the standpoint of those who care about Klamath Basin fisheries, the great failure of laws and institutions did not come in 2001 with the ESA. Rather, it was the failure of anything short of the ESA to make a meaningful difference in providing water for aquatic ecosystems that had reached the point of crisis.

Third, while the ESA has been bashed for its impacts on Klamath Project farmers, it seems clear that a hard-nosed law was needed to rescue the basin's lakes and rivers. Given that many of the ESA's harshest critics are also proud defenders of the western water law of prior appropriation, there is much irony in their criticism. In many ways, the ESA is the mirror image of western water law. The ESA protects endangered species with limited consideration of economic impacts; western water law protects economic water users with very limited consideration of environmental impacts. Neither the ESA nor western water law gives much regard to equity arguments, and neither offers a balancing test for making decisions. Both laws have been criticized for years but have remained essentially intact. Its detractors say that the ESA is too rigid, too one-sided, and leads to harsh and unfair real-world results. But the long view of history in the Klamath Basin shows that these criticisms apply with equal or greater force to the water laws that favored irrigation at the expense of all other interests.

The Klamath water crisis of 2001 was an extraordinary event, and it still echoes through the basin, the region, and our nation's capital. By raising the visibility and urgency of the basin's water problems, perhaps the crisis will ultimately increase the chances for sound, sustainable solutions in the Klamath. One hopes that the crisis will also hold a valuable lesson for the entire West, encouraging water stakeholders and decision-makers to tackle big problems before they spin out of control.

Those who ignore this lesson run the risk that some other basin will become the dreaded "next Klamath." Make no mistake, the Klamath is just one of many places in the West where change comes slowly, where water demands far exceed the reliable supply, and where native peoples and species are still seeking an even break.