Water Law Review

Volume 5 | Issue 1

Article 10

9-1-2001

A Relic Dam Dislodged by a Dormant Doctrine: The Story of Beneficial Use and Savage Rapids Dam

Joe S. Whitworth

Follow this and additional works at: https://digitalcommons.du.edu/wlr

Custom Citation

Joe S. Whitworth, A Relic Dam Dislodged by a Dormant Doctrine: The Story of Beneficial Use and Savage Rapids Dam, 5 U. Denv. Water L. Rev. 183 (2001).

This Article is brought to you for free and open access by the University of Denver Sturm College of Law at Digital Commons @ DU. It has been accepted for inclusion in Water Law Review by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu,dig-commons@du.edu.

A RELIC DAM DISLODGED BY A DORMANT DOCTRINE: THE STORY OF BENEFICIAL USE AND SAVAGE RAPIDS DAM

JOE S.WHITWORTH[†]

I. Introduction		184
II. The Water Needs of	Settling a Dry Land	186
III. Savage Rapids Dam:	Holding on to the Old and	
Holding Back the Ne	·W	189
A. Regional History.		189
B. Fish Passage Prob	lems at Savage Rapids Dam	190
C. Conscious Ignora	nce: Reports Identifying Removal	
as Best and Only	Option	193
D. Failure to Prove B	eneficial Use, Missed Timelines	
and No Due Dilig	ence: GPID's Contested Case	195
E. The Bill to Remov	e the Savage Rapids Dam	201
IV. Coming Full Circle:	Meaning What We said 150	
Years Ago	-	202

A simple idea born of settling the West in the nineteenth century, "beneficial use" has long sought to require active and actual use in order to maintain a water right, although its on-the-ground implementation has not always ensured water use efficiency. However, as fish runs decline, it might represent a powerful tool to bring down outmoded irrigation dams in the West, and meet the conservation challenges of the twenty-first century. This article examines the controversy surrounding the proposed removal of Savage Rapids Dam on the Rogue River in Oregon, a large diversion structure owned by Grants Pass Irrigation District. In 1982, after finding that the District put only about half of its water permit to actual use, the Oregon Water Resources Department ("WRD") conditioned the continued use of its water right on resolution of fish passage issues. When the District failed to demonstrate sufficient progress, WRD cancelled the right and dramatically changed the tone of the discussion surrounding a charged dam removal debate. Ultimately, by requiring an irrigation district to prove the efficient use of its original water right, WRD demonstrated the strength of the beneficial use doctrine to supply the water needed for imperiled fish in the rapidly growing West.

[†] Executive Director, Oregon Trout; J.D. 2000, Northwestern School of Law of Lewis & Clark College; A.B. 1991, Dartmouth College. The author thanks Professor Michael C. Blumm for a grueling last-paper-of-law-school experience and also thanks his great wife, Elizabeth, for her patience.

I. INTRODUCTION

Built in 1921, the Savage Rapids Dam ("SRD") rises thirty-nine feet above the riverbed,¹ with a span of 456 feet.² More than eighty years later, it stands as a significant spawning barrier for the Southern Oregon Coho salmon, listed as threatened³ under the Endangered Species Act⁴ in 1997.⁵ Environmentalists have supported the removal of the dam for several years, and the National Marine Fisheries Service ("NMFS") has called the dam the worst fish-killer on the Rogue. Due to its poorly designed fish ladders and screens, the dam accounts for a significant amount of fish passage problems.⁶ In 1929, the state of Oregon originally permitted the dam to irrigate 18,400 acres of agricultural land. Water diverted from the dam now irrigates less than half of that, approximately 7,400 acres, mainly for the benefit of lawn care in an increasingly subdivided area, with many hobby farms of less than one acre in size.⁷

A long history of fish passage problems at SRD led to a late twentieth century debate about removal as a way to lessen its negative effect on the renowned Rogue River fishery. In the West, solutions to such debates do not come easy. Despite a dam removal plan that alleviated all fish passage problems—one which cost significantly less than retaining the dam and held irrigators economically harmless through an electric pumping scheme—the local irrigation district held steadfast against removal. Only after the state cancelled part of its permitted water right did the irrigation district vote to remove the dam.

One can trace the fault lines underlying the conflict over the SRD debate to the water policies of the nineteenth century, which sought to

4. Id. §§ 1531-1544 (1994). Congress enacted the Endangered Species Act in 1973 for the express purpose of providing for the conservation of threatened or endangered species and the ecosystems upon which they depend. Id. § 1531(b).

5. Threatened Status for Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU) of Coho Salmon, 62 Fed. Reg. 24,588, 24,607-08 (May 6, 1997) (codified in part at 50 C.F.R. pt. 227 (1997)); see also ENDANGERED SPECIES ACT STATUS REVIEWS AND LISTING INFORMATION, http://www.nwr.noaa.gov/lsalmon/salmesa/index.htm (last visited Sept. 7, 2001).

6. BUREAU EIS, supra note 1, at S-4.

7. DAVID J. NEWTON, GRANTS PASS IRRIGATION DISTRICT WATER MANAGEMENT STUDY 1-3 (1994) [hereinafter NEWTON STUDY]. Of the 5,700 lots the District irrigates, 4,030 (71%) are less than one acre in size, and only fifteen lots are greater than twenty acres in size. *Id.* at 4.

^{1.} BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, PLANNING REPORT AND ENVIRONMENTAL STATEMENT: FISH PASSAGE IMPROVEMENTS, SAVAGE RAPIDS DAM S-5 (1995) [hereinafter BUREAU EIS].

^{2.} Bureau of Reclamation, Dataweb, Grants Pass Project, Oregon, http://dataweb.usbr.gov/html/grantspass.html (last modified Jan. 20, 2001).

^{3.} A "threatened species" is defined under the Endangered Species Act as "any species which is likely to become an 'endangered species' within the foreseeable future throughout all or a significant portion of its range." Endangered Species Act, 16 U.S.C. § 1532(20) (1994). An "endangered species" faces extinction throughout all or a large part of its range. Id. § 1532(6).

settle and develop the West. The aridity of the western landscape,⁸ the immediate water needs to insure a productive landscape, and the relative scarcity of people led to a water policy created to foster settlement.⁹ The cobbled-together water use policies, stemming from mining laws and customs, continually provided incentives to develop the early West,¹⁰ but times have changed. With a growing number of listed salmonids,¹¹ a tradition of inefficient means of irrigation,¹² and a rapidly increasing population,¹³ the West finds itself at the frayed edges of a commons once considered endless.¹⁴ The legal and social culture that so ably settled that dry land now arrives at a crossroads. It can stand as a relic wedged between the early and the coming West, or it can tap into latent strength and forge ahead to provide adequate water for the emerging West of the twenty-first century.

This paper argues that where state water law lives up to its plain language, it can provide a powerful legal handle to force removal of outmoded dams that obstruct fish passage. Section II addresses the issue that although western water use developed perhaps as an eraappropriate scheme, historically lax enforcement has served as an obstacle to progressive water use. Section III traces the Savage Rapids Dam conflict. The section illustrates how the historically under-

10. See Morton v. Solambo Copper Mining Co., 26 Cal. 527 (1864). The court explained that

[t]hese customs. . .were few, plain and simple, and well understood by those with whom they originated. . . . And it was a wise policy on the part of the Legislature not only not to supplant them by legislative enactments, but on the contrary to give them the additional weight of a legislative sanction. These usages and customs were. . .demanded by the necessities of [the] communities. . .

Id. at 532-34.

11. See ENDANGERED SPECIES ACT STATUS REVIEWS AND LISTING INFORMATION, Listing Status Snapshot, http://www.nwr.noaa.gov/lsalmon/salmesa/index.htm (visited Sept. 7, 2001). As of this writing, fourteen salmonids are listed as threatened or endangered under the federal Endangered Species Act. *Id.*

12. See generally Janet C. Neuman, Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use, 28 ENVTL. L. 919, 987 (1998).

13. U.S. CENSUS BUREAU, CURRENT POPULATION REPORTS, POPULATION PROJECTIONS: STATES 1995-2025, at 25-1131 (1997). The West is the fastest growing region in the United States. By 2025, the population of the eleven westernmost contiguous states will grow by nearly twenty-nine million. *Id.*

14. Garrett Hardin, *The Tragedy of the Commons*, SCI., Dec. 1968, at 1243, 1243. Hardin hypothesizes that when resources are finite, individually rational decisions lead to collective deficiency and depletion of the resources in the long run, unless behavior changes. *Id.*

^{8.} Reed D. Benson, Whose Water Is It? Private Rights and Public Authority Over Reclamation Project Water, 16 VA. ENVIL. L.J. 363, 363 (1997). ("The average annual precipitation in the seventeen western states is twenty-one inches, but in many places is far less.").

^{9.} See, e.g., Clark v. Nash, 198 U.S. 361 (1905). The Court recognized early on that the dryness of the region forced new ways of using water in order to develop the West. The western states extensively altered the riparian rules of the East "because of the totally different circumstances in which their inhabitants are placed...and [because] such alterations have been made for the very purpose of thereby contributing to the growth and prosperity of those [s]tates arising from mining and the cultivation of an otherwise valueless soil, by means of irrigation." *Id.* at 370.

enforced state water law doctrines of beneficial use and waste prohibition could provide legal means to remove outmoded, fishharming dams in the West. Section IV asserts that by rigorously enforcing the plain language of the beneficial use doctrine, the West can avert further declines in its once abundant salmon runs while supplying the water needed to meet the region's present and future demands.

II. THE WATER NEEDS OF SETTLING A DRY LAND

The seventeen contiguous states west of the 100th meridian¹⁵ receive dramatically less rain than states east of the meridian.¹⁶ Because all productive resource use depends on the availability of water, a dry region growing with enterprising souls is a recipe for adaptation. "[A] nation accustomed to plenty and impatient of restrictions and led westward by pillars of fire and cloud"¹⁷ must either engineer around aridity or adapt to it.¹⁸ Growing crops required a scheme for moving available water from its source to arable lands via irrigation ditches. The scheme, adopted through the doctrine of prior appropriation, arose originally from customs prevalent in mining camps on public lands.¹⁹ Under the prior appropriation doctrine, a water appropriator, upon diverting water out of a stream and putting it to a "beneficial use," such as agriculture, mining, or stock watering, obtains a water right superior to all later users.²⁰ This "first in time, first in right" doctrine²¹ rewarded industriousness and provided stability to water development for economic purposes in the early West. This firmly established and ascertainable hierarchy of water rights furthered the development of the West. In this way, the western water policy that developed in the mid-nineteenth century was born of necessity. Courts formalized and affirmed the policy through their decisions.

^{15.} The seventeen western states are Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming. *See* U.S. DEP'T OF INTERIOR, BUREAU OF RECLAMATION, FINAL ENVIRONMENTAL IMPACT STATEMENT, PROPOSED ACREAGE LIMITATION AND WATER CONSERVATION RULES AND REGULATIONS i (1996).

^{16.} Benson, supra note 8, at 363.

^{17.} WALLACE STEGNER, WHERE THE BLUEBIRD SINGS TO THE LEMONADE SPRINGS: LIVING AND WRITING IN THE WEST 75 (1992). A common theme of Stegner's writing is the feverish pace at which early westerners ran to fulfill their manifest destiny of settling the West, despite the obstacle of its dryness.

^{18.} Id.

^{19.} See, e.g., Morton v. Solambo Copper Mining Co., 26 Cal. 527, 532-33 (1864).

^{20.} See, e.g., IDAHO CONST. art. XV, § 3 (1890).

^{21.} See Irwin v. Phillips, 5 Cal. 140, 147 (1855). Irwin arrived first on the South Fork of Poor Man's Creek and diverted the entire stream out of its bed and into his diversion canal. The court invoked the Latin phrase: "qui prior est in tempore, potior est in jure," or "first in time, first in right" to ratify the customs of the miners in gold country. Phillips had the misfortune of arriving later and selecting the bank of the stream from which Irwin had already diverted. The court forced Phillips to abide the disadvantages of his own selection. See generally id.

^{22.} See, e.g., id.

In 1902, Congress passed the Reclamation Act ("Act").²³ The Act aided the average family farmer in covering the substantial up-front costs involved with damming and irrigation works, and manifested the understanding of water's central role in the orderly development of the West.²⁴ The Act also authorized the government to build dams, ditches, and other facilities to insure water availability for the irrigation of small family farms.²⁵ The United States Secretary of the Interior was authorized to approve, build, and then operate the projects on federal lands. To fund the projects, the Bureau of Reclamation ("Bureau") contracted with irrigation districts, which in turn delivered the project water to its patrons. The new works vastly improved the usefulness of the land, and their impact went far beyond the acres watered.²⁶ Whole communities grew up around the agricultural base; hundreds of acres of alfalfa provided winter feed for thousands of acres of cattle operations. Farm equipment supply companies, gas stations and grocery stores followed the irrigation projects throughout the region. Communities based on ranching and farming quickly spread across the West.27

Working in concert with the prior appropriation doctrine, the projects that the Act authorized established new limits on the extent and location of the West's development. With over 25,000 miles of canals, 37,000 miles of distribution ditches, and 17,000 miles of drains allowing the dry land to bloom, the unmistakable imprint of the Bureau's irrigation effort still exists today.²⁸ Throughout the West, more than a million artificial reservoirs, lakes, and ponds store 294 million acre-feet of water,²⁹ enough to put all of Montana, Wyoming, Colorado, and New Mexico under a foot of water.³⁰

^{23.} Reclamation Act of 1902, ch. 1093, 32 Stat. 388, 390 (codified at 43 U.S.C. § 372 (1994)).

^{24.} See Peterson v. United States Dep't of Interior, 899 F.2d 799, 802-03 (9th Cir. 1990) (quoting United States v. Tulare Lake Canal Co., 535 F.2d 1093, 1119 (9th Cir. 1976)). The court explained that the Reclamation Act of 1902 encompassed three goals: "to create family-sized farms in areas irrigated by federal projects . . . , to secure the wide distribution of the substantial subsidy involved in reclamation projects and [to] limit private speculative gains resulting from the existence of such projects." *Id.*

^{25.} Reclamation Act of 1902, ch. 1093, 32 Stat. 388 (codified as amended at 43 U.S.C. §§ 371-498 (1994)). The Act also provided that the right to the use of water shall be appurtenant to the land irrigated, and that no more that 160 acres of irrigable land be sold to any one person. By 1982, the number of acres irrigated by a qualified recipient was 960. 43 U.S.C. §§ 372, 375, 390dd (1994).

^{26.} CHARLES F. WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST 248 (1992).

^{27.} Id.

^{28.} Benson, *supra* note 8, at 365-66 (citing U.S. DEP'T OF INTERIOR, BUREAU OF RECLAMATION, FINAL ENVIRONMENTAL IMPACT STATEMENT, PROPOSED ACREAGE LIMITATION AND WATER CONSERVATION RULES AND REGULATIONS, ch. 3, at 3 (1996)).

^{29.} An acre-foot equals the water needed to cover one square acre under one foot of water.

^{30.} WILKINSON, *supra* note 26, at 259 (citing statistics from U.S. WATER RESOURCES COUNCIL, THE NATION'S WATER RESOURCES: 1975-2000, VOLUME 2: WATER QUANTITY, QUALITY, AND RELATED CONSIDERATIONS 12-13 (1978); U.S. DEP'T OF INTERIOR, BUREAU OF RECLAMATION, 1989 SUMMARY STATISTICS: WATER, LAND, AND RELATED DATA I

Mindful of its scarcity, if unwilling to accept its natural limits, western water users attempted to head off waste of water resources with simple language. Beneficial use, without waste, is the basis, measure, and limit of a water right.³¹ No water user may appropriate more than is reasonably necessary to accomplish a specific beneficial use; to do so is "waste" and could result in forfeiture of the right, either in whole or in part.³² While this sounds as though the irrigator must use each drop frugally to maintain an established right, the system tends towards one of customary practice, rather than technologic advance, and the West has generally tolerated considerable inefficiencies in delivering water to dry land.⁵³ Historically, the concepts of beneficial use and waste have served as an often mentioned but rarely enforced legal standard.³⁴

The livelihoods that early western settlers carved from the landscape stand as testimony to their resourcefulness, ingenuity, and stubbornness. From this beginning, a distinctive western mindset developed, imbued with the notion that one must never relinquish even the slightest amount of production gained from the land. Although the fabric of such thinking is beginning to fray under the strain of population growth and declining species diversity, the decades long saga surrounding the potential removal of the Savage Rapids Dam demonstrates that the grip of this longstanding western mindset remains strong.

In an irrigation district where encroaching population has caused actual irrigation needs to plummet from historic levels, the philosophical opposition to removing the unproductive dam has provided fuel to avoid action for years. Despite benefits of removal, such as lower costs, no loss of water delivery, improved species protection, and increased fishery revenues, the irrigation district in charge of the dam has worked hard to retain it. Only after a state

34. Neuman, supra note 12, at 937.

^{(1989)).}

^{31.} See, e.g., OR. REV. STAT. § 540.610(1) (1999).

^{32.} George W. Pring & Karen A. Tomb, License to Waste: Legal Barriers to Conservation and Efficient Use of Water in the West, 25 ROCKY MTN. MIN. L. INST. 25-1, 25-10 (1979). Under the beneficial use doctrine, a water right is conditional upon being put to beneficial use—essentially, you use it or you lose it. Id.

^{33.} See, e.g., In re Water Rights of the Deschutes River and its Tributaries, 36 P.2d 585, 586-89 (Or. 1934). The court determined that an irrigator whose irrigation system lost 45 percent of its conveyance due to open canals in poor soil in the high desert of Oregon did not violate the no-waste standard of the beneficial use doctrine. *Id.*

In the 1920s and 1930s, it was both customary and acceptable to irrigate poor soil with earthen ditches, losing half or more of the water in conveyance, as long as the ditches were really ditches and were only reasonably leaky. Even though competing water users made strenuous arguments that such use was wasteful, and the reviewing courts grappled at length with the issues, all the while decrying waste, in the end, the courts refused to declare the practices legally wasteful because they were customary. Very little changed over the next half century. Water use had to be completely out of line with local custom or blatantly inefficient to merit an actual finding of waste from a court.

inquiry revealed the dam's wastefulness and threatened to deprive the district of a portion of its water right did the irrigation district genuinely consider removal as an option. Opening irrigator's minds to the possibility of dam removal has taken prolonged effort³⁵ and ultimately, state enforcement of the beneficial use doctrine.

III. SAVAGE RAPIDS DAM: HOLDING ON TO THE OLD AND HOLDING BACK THE NEW

A. REGIONAL HISTORY

Set aside in 1968 as one of the original eight waterways under the Wild and Scenic Rivers Act,³⁶ the Rogue River of Southwest Oregon flows 215 miles from its Crater Lake headwaters through the Cascade, Siskiyou, and Coastal Ranges before spilling into the Pacific Ocean.³⁷ Historically a strong steelhead and salmon fishery, the Rogue's challenging whitewater, extraordinary wildlife viewing, and dramatic cliffs³⁸ have made it a national treasure. The Rogue River Basin supports the largest population of wild anadromous salmonids in Oregon.³⁹

Agricultural settlers in the early 1900s, however, viewed the river primarily as a potential source of irrigation water. In 1917, private interests formed the Grants Pass Irrigation District ("GPID" or "District") to provide irrigation water to its patrons in Jackson and Josephine Counties, Oregon. The District constructed Savage Rapids⁴⁰ Dam in 1921, and used the resulting reservoir to feed turbine and

^{35.} WaterWatch of Oregon, a conservation group dedicated to taking action to protect and restore Oregon's rivers by focusing on water quantity and use, has participated in the Savage Rapids Dam issue since the early 1980s.

^{36.} The Wild and Scenic Rivers Act of 1968, 16 U.S.C. §§ 1271-1287 (1994). [C]ertain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

Id. § 1271; see also The Rogue National Wild and Scenic River, http://www.nps.gov/rivers/index.html (last updated Apr. 3, 2001).

^{37.} Nearly 85 miles of the river is designated under the Wild & Scenic Rivers Act as follows: wild, 34 miles; scenic, 7.5 miles; and recreational, 43 miles. These designated miles are below the Savage Rapids Dam but speak to the overall caliber of the Rogue River. See http://www.rogueweb.com/river (last visited Sept. 7, 2001).

^{38.} Hellgate Canyon is reportedly the site for the historic jump in the movie Butch Cassidy and the Sundance Kid. Id.

^{39.} BUREAU EIS, supra note 1, at S-1 to S-2.

^{40.} The rapids were named not for their savage character but rather for the Savage Family, early settlers in the region.

gravity diversions near Grants Pass, Oregon.⁴¹ In 1929, the Oregon Water Resources Department ("WRD") issued GPID a permit to divert water from the Rogue for the purpose of irrigating 18,400 acres of land.⁴² GPID maintains and operates the dam, with occasional support from the Bureau.⁴³

B. FISH PASSAGE PROBLEMS AT SAVAGE RAPIDS DAM

Although only recently a matter of legal significance,⁴⁴ fish passage at SRD has been an issue since the dam's construction in 1921.⁴⁵ The District originally built the dam without fish screens, which serve the important function of preventing fish from being diverted into the canals.⁴⁶ Although GPID eventually had them installed, the screens have continuing design problems. Because of high water diversion velocities at the dam, juvenile salmon are often battered and pinned against the screens (impingement), or sucked through the screens (entrainment), into the pumps and out into the irrigation ditches where they die. In its final listing notice of the Southern Oregon/Northern California Coho salmon, the NMFS noted that impingement and entrainment of juveniles into unscreened, or poorly screened diversions for irrigation contributed to the declining runs of salmon.⁴⁷

42. NEWTON STUDY, *supra* note 7, at 1. The initial 18,400 acre estimate of potentially irrigated agriculture land proved high. The maximum amount of land subject to irrigation was approximately 10,000 acres, and the actual irrigated acreage declined to 7,755 acres based on a final proof survey WRD began in the late 1970s. *Id.*

43. Bureau of Reclamation, Dataweb, Grants Pass Project, Oregon, http://dataweb.usbr.gov/html/grantspass.html (last modified Jan. 20, 2001). Although originally built with private funds, the Bureau played a direct role in GPID over its history. The Bureau rehabilitated the project in 1949-1955, upgraded fishways on both the north and south side of the river, provided improvements to fish passage facilities in 1978, and conducted studies on the improvement of fish passage in 1974 and 1995. *Id.*

44. After the Southern Oregon/Northern California Coho salmon evolutionarily significant unit ("ESU") declined from between 150,000 to 400,000 naturally spawning fish in the 1940s to approximately 10,000 naturally produced adults in 1997, NMFS listed this Rogue River Basin species as threatened under the Endangered Species Act on May 6, 1997. Threatened Status for Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU) of Coho Salmon, 62 Fed. Reg. 24,588, 24,607-08 (May 6, 1997) (codified at 50 C.F.R. pt. 227 (1997); *see also* ENDANGERED SPECIES ACT STATUS REVIEWS AND LISTING INFORMATION, LISTING STATUS: COHO, http://www.nwr.noaa.gov/lsalmon/salmesa/index.htm (last visited Sept. 7, 2001).

45. BUREAU EIS, supra note 1, at S-2.

46. Plaintiff's Complaint at 6, United States v. Grants Pass Irr. Dist. (D. Or. 1998) (No. 6-98-03034) [hereinafter Take Brief].

47. Threatened Status for Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU) of Coho Salmon, 62 Fed. Reg. 24,588, 24,592-93 (May 6, 1997) (codified at 50 C.F.R. 227 (1997)).

^{41.} See Bureau of Reclamation, Dataweb, Grants Pass Project, Oregon, http://dataweb.usbr.gov/html/grantspass.html (last modified Jan. 20, 2001). There are presently approximately 7,738 patrons in the District, with 1,500 having no other source of water for irrigation. Roughly 200 of these are larger irrigators, many of whom rely on irrigated crops as a primary source of income. *Id.*

GPID installed the first screens in 1934 to prevent entrainment.⁴⁸ In 1958, the Oregon State Game Commission ("OSCG")⁴⁹ measured the approach velocities to the gravity diversion screens at SRD and found that the velocities exceeded the minimum allowable to avoid impingement of juvenile salmon.⁵⁰ Furthermore, owing to the perpendicular orientation of the screens, water did not attain the sweeping velocity⁵¹ necessary to help juveniles avoid them, resulting in either entrainment or impingement. Today, mesh sizes that exceed NMFS criteria also contribute to the velocity problem, consequently, juveniles continue to perish in the irrigation ditches.⁵²

Although substantial juvenile salmon loss regularly occurred on the north bank,⁵³ the turbine intake pumps remained unscreened until 1958, after Congress appropriated the funds.⁵⁴ But the fish passage problems had only just begun. The screens, installed perpendicular to the flow of the river in front of the turbine pump intake, resulted in approach velocities of up to 3.3 feet per second, more than eight times the NMFS maximum of 0.4 feet per second.⁵⁵ Unable to break free of the water flowing through the screens, an estimated 38,000 juvenile salmonids died in July 1959 alone.⁵⁶ In the early 1970s, the Oregon Department of Fish and Wildlife ("ODFW") tested several configurations of the fish bypass system designed to reduce impingement. Two of these options were installing boards in front of the screens to create a velocity refuge, and using lights to attract juveniles to the bypass ports. The most successful configuration-a screen that shunts migrating fish down a ladder—yielded an impingement rate of 10 percent,⁵⁷ and remains in use today. However, the design of the bypass system includes several right angles, which catch enough debris to continue to kill 2 percent of all juveniles that enter.58

56. Id.

57. Id. at 8-9.

58. Id. at 10. The 1981 screen replacement did not affect the bypass system; the 2 percent mortality remains intact. Id.

^{48.} Take Brief, supra note 46, at 7.

^{49.} Now called Oregon Department of Fish and Wildlife ("ODFW").

^{50.} Take Brief, *supra* note 46, at 7. The velocities varied from 0.7 to 3.1 feet per second when the dam was operating at 100 cfs. Current NMFS criteria for juvenile fish screens set a maximum of 0.4 feet per second. *Id*.

^{51. &}quot;Sweeping velocity" is a term used to describe a flow and speed needed to sweep a fish over an obstacle, much the way an inflatable raft would "sweep" over a mostly submerged boulder in swift water.

^{52.} Take Brief, supra note 46, at 7. NMFS criteria allow a maximum mesh size of 3/32 of an inch; the screens on the gravity diversion screens are 1/8 of an inch in size. Id.

^{53.} Id. A 1947 OSGC study estimated the losses of juvenile salmon at the turbine intake at greater than 200,000 fish. Id.

^{54.} Congress allocated funds for the construction of fish protective facilities at Savage Rapids Dam on July 2, 1956. Public Works Appropriation Act of 1957, Pub. L. No. 84-641, 70 Stat. 474, 476 (1956).

^{55.} Take Brief, supra note 46, at 8. A 1959 OSGC study recorded the approach velocities around the intake turbines. Id.

In an effort to decrease entrainment, GPID upgraded the screens with better seals in 1981. The improved screen seals, however, came with a larger mesh size, resulting in fewer juveniles entrained around the seals, but more entrained through the screens themselves.⁵⁹ Although formal statistics on escapement rates since installation of the new screens do not exist, significant fish death has likely occurred. In 1991, a seal broke, sucking more than 100,000 juvenile salmonids from the river and into the main irrigation canal, killing a significant number of the fish.⁶⁰ NMFS investigated the incident in February 1998 and found many large gaps in the screen seals.⁶¹

The history of the SRD fish screens, diversion rates, and bypass shortcomings compelled NMFS to file a civil suit in 1998 under the ESA⁶² to enjoin GPID from taking⁶³ threatened Coho salmon.⁶⁴ NMFS charged that GPID's manner of water diversion at the site had and would continue to result in the death of the listed juvenile Coho.⁶⁵ By formally recognizing the seriousness of the fish passage issues, the NMFS suit had a distinct effect on the tenor of the ongoing dam removal debate, putting further pressure on the District to dismantle the dam. Since GPID could not realistically afford to retrofit the dam to improve fish passage, it became clear to stakeholders that the District's options were closing in.⁶⁶ Ultimately, NMFS' suit played an integral role in the Water Commission's Final Order. The Commission noted that compliance with the ESA would require dam removal for any continued operation.⁶⁷

61. Id.

62. Endangered Species Act, 16 U.S.C. § 1538(a) (1994). Of the ESA's legal protections, one of the most significant is its provision prohibiting any person or entity from engaging in activities that "take" threatened or endangered species. *Id.*

63. Id. § 1532(19). The term "take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." *Id.* Under the ESA, take of a species listed as either threatened or endangered is not permitted. *Id.* § 1538(a).

64. Threatened Status for Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon, 62 Fed. Reg. 24,588, 24,607-08 (May 6, 1997) (codified at 50 C.F.R. pt. 227 (1997)); see also ENDANGERED SPECIES ACT STATUS REVIEWS AND LISTING INFORMATION, http://www.nwr.noaa.gov/lsalmon/salmesa/index.htm (last visited Sept. 7, 2001). After the Southern Oregon/Northern California Coho salmon evolutionarily significant unit (ESU) declined from between 150,000 to 400,000 naturally spawning fish in the 1940s to approximately 10,000 naturally produced adults in 1997, NMFS listed the Rogue River Basin species as threatened under the Endangered Species Act on May 6, 1997. Threatened Status for Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU) of Coho Salmon, 62 Fed. Reg. at 24,607-08.

65. Take Brief, supra note 46, at 1, 10.

66. Telephone Interview with Reed Benson, Executive Director, WaterWatch (Nov. 15, 2000).

67. Cancellation of Permit No. 50957, and the Denial of the Request for Modification of Implementation Schedules, Oregon Water Resources Commission at 21 (Oregon Water Res. Comm'n Nov. 13, 1998) [hereinafter Final Order].

^{59.} Id. In 1981, GPID replaced the 1959 screen mesh size, 5/32 of an inch, with a mesh size of 1/4 of an inch. Id.

^{60.} Take Brief, supra note 46, at 10. Despite local efforts, an estimated 10,000 died in the canal. Id.

C. CONSCIOUS IGNORANCE: REPORTS IDENTIFYING REMOVAL AS BEST AND ONLY OPTION

GPID has known of and grappled with fish passage problems for better than three-quarters of a century. But the inquiries have centered on interim and incremental improvements to passage, rather than permanent resolution of the problems.⁶⁶ That changed in 1988. In response to requests from Josephine County⁶⁹ and GPID, the Bureau initiated a Water Management Improvement study to identify a permanent solution to fish passage problems at SRD and to help resolve conflicts over wasteful water use in Josephine County.⁷⁰ The Bureau's study focused on the probability of federal listing of northwest salmonid stocks,ⁿ the chronic fish passage problems at SRD, the inadequacy of GPID's hydraulic works to operate at reduced speeds to avoid take, and the reality that the existing diversion works were near the end of their useful lives.⁷² The study then considered two permanent alternatives for the dam.⁷³ The two concepts pitted the net value of installing electric pumps and removing SRD (the pumping alternative) against the net value of retaining SRD and retrofitting the dam to fix the fish passage problems (the retention alternative).⁷⁴ The Water Resources Council provided planning guidelines requiring the Bureau to select the plan with the greatest net economic benefits.⁷⁵ Because it saved time, money, and fish, while ensuring delivery of irrigators' water, the Bureau recommended removal of SRD, the pumping alternative.⁷⁶

The pumping alternative included installing electric powered

Savage Rapids Dam is a source of 'take' of threatened Coho salmon, which constitutes a violation of the ESA. The NMFS. . .has consistently stated that dam removal must be a feature of any incidental take permit. . .for continued operation. The record does not show that further study, rather than dam removal, is consistent with the ESA.

Id.

68. BUREAU EIS, *supra* note 1, at S-1. The Bureau completed detailed fish passage studies in the 1970s, and made interim fish passage improvements between 1977 and 1981. Because hydropower development was then being considered for the dam, the District and the Bureau put additional fish passage improvements on hold. Due to costs and lack of interest, the District and the Bureau deferred studies of the irrigation system improvements at that time. *Id.*

69. SRD is located on the county line separating Josephine and Jackson counties in southwestern Oregon.

70. BUREAU EIS, supra note 1, at S-1.

71. Id. at S-2. At the time of the report, NMFS had proposed two ESUs for listing as threatened under the ESA that would impact operations at SRD: Klamath Mountains Province Steelhead and the Southern Oregon/Northern California Coho salmon. Id.

72. Id.

73. Id. at S-2 to S-3.

74. Id. at S-3.

75. BUREAU EIS, supra note 1, at S-3. The Water Resource Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies "requires Federal water agencies to select the plan with the '... greatest net economic benefits compatible with protecting the Nation's environment...' as the preferred alternative." Id.

76. Id at S-3, S-14.

pumping plants on each bank just downstream from SRD, dam removal, and forgiveness of the debt owed to the federal government for the construction of SRD.⁷⁷ The largest benefit the pumping alternative provided was the elimination of all salmon and steelhead passage problems. The Bureau expected the pumping alternative to increase escapement⁷⁸ by 22 percent.⁷⁹ The Bureau projected the increase in escapement to produce 26,700 new spawning fish once the five-year construction concluded, a harvest increase of 87,900 fish, and an annual monetary value of \$4,998,600 to the sport and commercial fisheries in the area.⁸⁰

The electric pumping plants required a diversion capacity of 150 cubic feet per second ("cfs"⁸¹) in order to achieve the desired result.⁸² This flow would not only meet or exceed GPID's diversion needs,⁸³ but also prevent harm to irrigators during and after the removal of the dam. Although the study did not recognize the monetary irrigation benefit, new electric pumping facilities would serve to extend the life of GPID's aging diversion facilities.⁸⁴ Furthermore, the pumping alternative placed the screens parallel to river flow,⁸⁵ decreasing risk of impingement and entrainment.

The Bureau determined that the retention alternative would require extensive modification to the SRD structure, equipment, and the river channel itself.⁸⁶ The construction costs associated with the retention alternative totaled \$17.6 million,⁸⁷ while the five-year pumping alternative costs stood at \$11.2 million.⁸⁸ The retention alternative would nearly eliminate salmon and steelhead passage problems and increase escapement by 17 percent. As a result, 20,700 spawners would survive, leading to a projected harvest increase of

82. BUREAU EIS, supra note 1, at S-4.

83. NEWTON STUDY, *supra* note 7, at 14. Average monthly flows in GPID canals stand at 130 cfs, and never exceed 145 cfs. By irrigation season, month flows average: May, 117 cfs; June, 137 cfs; July, 138 cfs; August, 145 cfs; September, 115 cfs. *Id*.

84. BUREAU EIS, supra note 1, at S-4.

86. Id. at S-6 to S-7. Projected construction costs of the dam retention alternative increase as a result. Id.

87. Id. at S-7. Note that assuming 8 percent interest over a six year construction period would bring the total cost to \$21,343,000. Id.

88. Id. at S-5. Note that assuming 8 percent interest over a five year construction period would bring the total cost to \$13,255,000. Id.

^{77.} Id. at S-14.

^{78.} Escapement is the number of adults that return to spawn.

^{79.} BUREAU EIS, supra note 1, at S-4.

^{80.} Id.

^{81.} See OR. ADMIN. R. 690-014-0020 (1988). Water rights are limited to a certain rate of diversion at a given point in time (a flow rate) and a total volume of water over the length of the irrigation season (the total duty). The rate is usually expressed in cubic feet per second ("cfs"). Cfs is a measure of the flow of water that would fill an imaginary one-foot square cube that passes by a given point in a second (448.83 gallons of water per minute). The duty is expressed in acre-feet, a measurement of a volume of water that would cover one acre of land one foot deep in water (325,900 gallons). *Id.*

^{85.} Id. at S-5.

69,100 fish, representing an annual value of \$3.87 million.⁸⁹ With construction costs two-thirds lower,⁹⁰ fishery value benefits 1.3 times greater,⁹¹ and salmon and steelhead escapement increased by nearly 25 percent,⁹² dam removal provided the greatest net economic benefit. Thus, removal became the Bureau's preferred alternative.⁹³

D. FAILURE TO PROVE BENEFICIAL USE, MISSED TIMELINES AND NO DUE DILIGENCE: GPID'S CONTESTED CASE

WRD applies a proof survey regulation to guard against waste of water.⁹⁴ The regulation requires that after filing for and receiving a water right permit from WRD, appropriators must then prove they will apply the designated amount of water to the beneficial use indicated in their permit. In order to gain a water right certificate under Oregon law, users must prove actual application of their appropriated water to the beneficial use through a WRD proof survey.⁹⁵

In a WRD proof survey in the late 1970s, GPID was unable to prove actual use of its full permitted water right.⁹⁶ The Water Resources Commission ("Commission")⁹⁷ consequently marked the unused portion of GPIDs original rights for forfeiture. With an estimated 18,400 acres of irrigable land when formed, GPIDs initial 1929 permit authorized diversion of 230 cfs from the Rogue River.⁹⁸ This diversion rate overshot actual use in the basin by more than 8,000 acres; diversions historically ranged between 180 and 190 cfs.⁹⁹ Based on the decreased number of actual acres irrigated, WRD issued GPID a water right certificate for 96.94 cfs in 1982,¹⁰⁰ more than halving its historic right.

The decreased water right proved difficult for the District to work with. The District soon found it needed additional water to meet

95. See id.

^{89.} BUREAU EIS, supra note 1, at S-6.

^{90.} Id. at S-8, S-11 to S-12.

^{91.} Id. at S-9, S-11 to S-12.

^{92.} Id.

^{93.} Id. at S-11 to S-14.

^{94.} OR. ADMIN. R. 690-330-0010 (1996). Proof surveys compare the water right issued against the water actually put to beneficial use on irrigated land. If the actual use varies from the use outlined in the original permit, the appropriator may only retain the portion that he or she proves used. *Id.*

^{96.} NEWTON STUDY, supra note 7, at 1.

^{97.} See About the Oregon Water Resources Commission, http://www.wrd.state.or.us/commission/about.html (last visited Sept. 7, 2001). The Water Resources Commission is a seven-member citizen board which establishes water policy for the state and oversees the activities of the Water Resources Department.... [T]he Commission sets statewide water policy through Administrative Rules for the management and allocation of Oregon's surface and ground waters.... [M]embers are appointed by the Governor for four-year terms, subject to confirmation by the Oregon Senate.

Id.

^{98.} NEWTON STUDY, supra note 7, at 1.

^{99.} Id.

^{100.} Final Order, supra note 67, at 1.

irrigation demands, some blamed the inefficiency of GPID's old and poorly maintained delivery system.¹⁰¹ In 1987, the District applied to WRD for more water to irrigate the same lands.¹⁰² Recognizing that GPID could not immediately reduce its historical diversion without significantly impacting patrons and local communities, WRD issued another permit in 1990.¹⁰³ This permit allowed GPID to continue historical diversions, but only for the amount of time needed to diligently study and develop plans to address concerns about the inefficient use of water, and the adverse impacts of SRD on the Rogue River fishery.¹⁰⁴ This prompted GPID to commission the Grants Pass Irrigation District Water Management Study ("Newton Study"), 105 which ran parallel to the Bureau EIS on fish passage improvements at SRD.¹⁰⁶ Satisfied with GPID's progress in October 1994, the Commission extended the permit to October 1999, and required that the permit be consistent with the State Scenic Waterway Act¹⁰⁷ and the public interest.¹⁰⁸ The 1994 order also authorized the Commission to cancel the permit extension if GPID failed to comply with the conditions of the permit. This included "failure to exercise due diligence in implementing the approved conservation and fish passage plans."109

By the time the Bureau formally issued the 1995 Planning Report and Final Environmental Statement on fish passage at the dam, NMFS, the U.S. Fish and Wildlife Service ("USFWS"), the Oregon Department of Fish and Wildlife ("ODFW"), and a number of environmental groups had openly supported the removal alternative.¹¹⁰ In 1994, acting on a report it commissioned naming dam removal as the least expensive and best means of providing for fish passage,¹¹¹ the GPID Board passed a resolution to remove the dam and install pumping

106. See generally BUREAU EIS, supra note 1.

^{101.} NEWTON STUDY, supra note 7, at 1.

^{102.} Final Order, supra note 67, at 1.

^{103.} Id.

^{104.} Id.

^{105.} Named for David J. Newton Associates, Inc.s' completion of the technical report.

^{107.} Final Order, supra note 67, at 1; see OR. REV. STAT. §§ 390.805-390.925 (1985). Downstream from GPID's diversion, the Rogue River is designated as a scenic river, and the Department has set scenic waterway flows to protect fish and recreation values. The river flows have never met these standards during irrigation season. Final Order, supra note 67, at 7.

^{108.} Final Order, *supra* note 67, at 1-2. ("The conditions placed on the permit included the requirement that the District implement the conservation plan and plan to resolve fish passage problems, including removal of Savage Rapids Dam, as described in Chapters 7, 8, and 11 [of the NEWTON STUDY].").

^{109.} Id.

^{110.} BUREAU EIS, supra note 1, at S-3.

^{111.} NEWTON STUDY, *supra* note 7, at 11. The report stated that, "if [GPID's] responsibility to GPID patrons is to be fulfilled, they must work together with various other agencies, elected officials, and groups to implement removal of Savage Rapids Dam and installation in its place of pumps to supply adequate water to serve the patrons." *Id.*

plants in its place.¹¹² After years of declining irrigated acreage, growing awareness of the District's fish passage problems, studies demonstrating the clear benefits of dam removal, and the introduction of pumps that promised to maintain water delivery levels, progress toward a permanent solution seemed at hand. This came just in time to avert a "taking" under the anticipated ESA listings.¹¹³ This sense of progress, however, merely appeared to be such. In 1998, a contested case before the Commission found that GPID failed to exercise due diligence in removing SRD, and that further delay would be detrimental to the public interest, effectively canceling a significant portion of GPID's water rights.¹¹⁴

In April 1998, the Commission determined that GPID had failed to make any meaningful progress toward fulfillment of the permit requirements, and proposed to deny any additional permit modifications or extensions. Ultimately, the Commission sought to cancel all but the 96.94 cfs granted in 1982.¹¹⁵ When GPID appealed, the Commissioner¹¹⁶ presiding over the appeal faced two issues: (1) whether GPID had exercised due diligence in accordance with the October 1994 order; and (2) whether granting GPID's January 1998 request to extend the time allowed for progress toward removal would be detrimental to the public interest¹¹⁷ or was otherwise prohibited by law.¹¹⁸

Addressing the due diligence question, the Commissioner reviewed the October 1994 order extending the time for completion of the work required.¹¹⁹ She concluded that the Commission properly and clearly conditioned the permit¹²⁰ upon diligent progress toward execution of the fish passage plan, which included dam removal by

118. Final Order, supra note 67, at 5-6.

119. See generally id.

^{112.} BUREAU EIS, supra note 1, at S-3; see also Minutes and Memorandum of Board (Jan. 1994) (on file with GPID).

^{113.} Proposed Threatened Status for Three Contiguous ESUs of Coho Salmon Ranging From Oregon Through Central California, 60 Fed. Reg. 38,011 (July 25, 1995) (codified at 50 C.F.R. pt. 227 (1995)). NMFS proposed the Southern Oregon Northern California ESU of Coho as threatened under the ESA in July 1995. *Id.; see also* FEDERAL REGISTER ACTIONS FOR COHO SALMON *at* http://www.nwr.noaa.gov/lsalmon/salmesa/fractcoho.htm (last visited Mar. 13, 2001).

^{114.} Final Order, supra note 67, at 22.

^{115.} Id. at 2.

^{116.} Nancy Leonard, Chair of Oregon Water Resource Commission, presided over the hearing.

^{117.} See OR. REV. STAT. § 537.170(5)(a) (1987). Among these highest uses are "irrigation, domestic use, municipal water supply, power development, public recreation, protection of commercial and game fishing and wildlife, fire protection, mining, industrial purposes, navigation, [or] scenic attraction." Id.

^{120.} Id. at 7-8. Condition four of the 1994 order laid out, "'The District shall implement the conservation plan and the plan to resolve fish passage problems, including removal of Savage Rapids Dam, as described in Chapters 7, 8, and 11, Grants Pass Irrigation District Water Management Study, March 1994, in accordance with the schedule provided therein.'" (Emphasis in original). Id.

2001.¹²¹ The order left no doubt that the Commission intended to unconditionally require GPID to remove SRD.¹²²

The Commission Hearing Officer determined that, since GPID had assented to the conditions of the 1994 order, thereby gaining the permit extension, the District must comply with those conditions in the order. However, the District demonstrated its contempt for the conditions in three letters written within four months after WRD issued the order.¹²³ On February 16, 1995, the GPID board chairman wrote to U.S. Congressman Wes Cooley. The letter stated that WRD had

"approved [the District's] water conservation plan and the Board's decision to remove Savage Rapids Dam...." and that one of the District's "tasks [was] to organize a working group of people in Southern Oregon to support this move...." The Chair noted that "[a]t that time, I hope we will be able to ask for your support in obtaining federal funding for dam removal...."

Another letter followed on February 21, 1995. In this correspondence, marked "THIS CORRESPONDENCE IS PERSONAL <u>AND_CONFIDENTIAL</u>,"¹²⁵ the District chairman told Congressman Cooley that GPID had " 'made the above funding request to "remove Savage Rapids Dam" due to one factor. It is the "due diligence" clause in our current water permit.' "¹²⁶ The letter also noted " '[State] Senator Brady Adams and Congress[man] Bob Repine are working on three bills in the Oregon Legislature to alleviate the situation of dam removal,' and stated that the District has been under 'tremendous pressure' to remove the dam."¹²⁷ The letter went on to state that Jackson and Josephine County Commissions, the City of Grants Pass, and the District's Board all wanted to "save the dam,"¹²⁸ but " 'unless we receive help from all legislative areas, State and Federal, we will end up with the electric pumps and not 'saving Savage Rapids Dam'. "¹²⁹

The board chairman of GPID penned the most telling correspondence on February 20, 1995, to State Senator Brady Adams—also marked "<u>PERSONAL AND CONFIDENTIAL</u>."¹³⁰ The letter noted:

"[w]e realize you and Bob Repine are both working to 'Save Savage Rapids Dam.' [T]here is no question of this effort. We on the Board of Directors are of the same opinion. We are literally 'treading water'

125. Id.

- 127. Id.
- 128. Id.
- 129. Id.
- 130. Id.

^{121.} Final Order, supra note 67, at 11-12.

^{122.} Id. at 9.

^{123.} Id.

^{124.} Id.

^{126.} Final Order, supra note 67, at 9.

until the three bills introduced into legislation passes (sic) and are signed." The letter refers to "a 'fraction of people' who want us to 'jump off the cliff' and challenge the Water Resource Commission 'head-on'. However, as we earlier agreed, until we, GPID, are in a 'position of strength,' we must maintain the 'due diligence' clause in the permits."¹³¹

The letters demonstrated that GPID's federal funding inquiry "was merely a pro forma sideshow to its seeking to retain the dam.^{*,132} From this point on, GPID's argument that it had proceeded with due diligence with regard to dam removal only fared worse. The Commissioner rejected the District's attempt to blame poor progress on board member changes.¹³³ The Commissioner similarly rejected GPID's attempt to shift decision making authority concerning dam removal to the District.¹³⁴ Despite GPID's alleged continued work regarding consensus building, the Commission hearing officer ruled that since the District had not initiated action in nearly three years, the Commission could not consider their actions continuing.¹³⁵ Finally, the Commissioner quickly dispensed with GPID's argument that the "diligence requirement was not cumulative,"¹³⁶ stating "[a]s the ratio of time-to-inaction increases, so do the reasons to find a lack of due diligence."137 She held GPID failed to act with due diligence toward implementing the fish passage plan and dam removal.¹³⁸

133. Id. at 11.

Despite the District's Board-of-the-moment history of recall elections and fluctuating relationships with its patrons, the community, and the Department, it has been and remains a single unit, an irrigation district, acting through its Board. The October 1994 order requires the District to proceed with due diligence to comply with the provisions of the order. It does not require compliance only if the Board favors dam retention or removal, it does not threaten cancellation only if the Board favors dam retention or removal, and it does not require the Board to admire or despise the order itself. It requires the District—that single entity—to do what it is required to do, regardless of the makeup of its Board.

Id.

134. Id. at 13. These included the 1997 Annual Report and a January 15, 1997 internal handout for Board members. Both documents speak in terms of "responsibility to weigh all this information" rather than the District's continuing obligation to work toward implementing the fish passage plan, including dam removal. Id.

135. Id. at 14.

During the period after the ... order was issued, the District designed a newspaper advertisement to help explain and bolster support for dam removal, but then abandoned that educational component. It contracted with the Rogue Valley Council of Governments to help develop a community consensus, but then canceled the contract... It consulted with a lobbyist but failed to utilize any lobbyist's services to secure funding for dam removal. It included some small discussion about dam removal in a few newsletters, but [provided no context].

Id.

137. Id.

138. Id. at 22.

^{131.} Final Order, supra note 67, at 9.

^{132.} Id..

^{136.} Final Order, supra note 67, at 15.

The Commissioner then examined the second question—whether GPID's January 1998 request to modify its permit would impair the public interest, as defined by Oregon law¹³⁹ or was otherwise prohibited by law. GPID's modification request consisted of one sentence:

Grants Pass Irrigation District requests modification of implementation schedules in order to continue compliance with the due diligence requirements, continue to attempt resolution of fish passage issues, and continue to build community consensus regarding passage goals.⁴⁰

The Commissioner noted that the request did not include a specific statement about the changes GPID sought. Quoting Constable Dogberry in *Much Ado About Nothing*, the Commissioner said the request was simply " 'too cunning to be understood'."¹⁴¹

The Commissioner concluded that to further delay or eliminate the existing requirement to remove the dam for further study on fish passage issues would impair the public interest.¹⁴² In reaching that conclusion, the Commissioner reviewed several factors. First, the timing of the request-"year four of a five-year extension during which the District was to have implemented the dam removal plan"¹⁴³—would effectively send the process back to the beginning.¹⁴ Second, the Commission considered the public interest factors set out in the statute detailing determination of the highest use of Oregon waters.¹⁴⁵ Under Oregon law, the Commission must consider and try to achieve balance of uses to maximize economic development and prevent "wasteful, uneconomic, impracticable or unreasonable use of the waters involved."¹⁴⁶ The Commissioner examined the possible negative effects of dam removal on irrigation and domestic use, public recreation, fire protection, and property values. The Commissioner found these effects either negligible or offset by gains created from removal.¹⁴⁷ The Commission further indicated that protection of the Rogue River fishery outweighed the other public factors identified. To retreat from dam removal when the record clearly showed it as the least costly and best method of solving the fish passage problems at the dam would impair the public interest.¹⁴⁸

144. Id.

^{139.} OR. REV. STAT. § 537.170(6) (1999).

^{140.} Final Order, supra note 67, at 17.

^{141.} *Id*.

^{142.} Id. at 21.

^{143.} Id. at 18.

^{145.} See OR. REV. STAT. § 537.170(8)(a) (1999). Among these highest uses are "irrigation, domestic use, municipal water supply, power development, public recreation, protection of commercial and game fishing and wildlife, fire protection, mining, industrial purposes, navigation, [or] scenic attraction." Id.

^{146.} Id. § 537.170(8)(e). "The prevention of wasteful, uneconomic, impracticable or unreasonable use of the waters involved." Id.

^{147.} Final Order, supra note 67, at 18-19.

^{148.} Id. at 20-21.

SAVAGE RAPIDS DAM

In examining NMFS' take suit against GPID,¹⁴⁹ the final order noted that operation of SRD resulted in an illegal take of threatened Coho salmon.¹⁵⁰ The order also noted that NMFS consistently affirmed that dam removal must occur before GPID could obtain any incidental take permit for continued operation of the dam.¹⁵¹ Pursuant to the terms of the 1994 permit extension, the Commission cancelled the additional water rights.¹⁵² This forced GPID to make due with 96.94 cfs, about half of what it historically diverted, but the entire amount it had proven put to use. GPID appealed, but the Oregon Court of Appeals denied GPID's petition for judicial review of the final order.¹⁵³

E. THE BILL TO REMOVE THE SAVAGE RAPIDS DAM

The tenor and outcome of the final order sobered GPID's board of directors. Faced with growing opposition stemming from environmental concerns,¹⁵⁴ the loss of half its diversion right,¹⁵⁵ failed state legislative fixes,¹⁵⁶ and burgeoning litigation and administrative hearing costs, the District had little room to maneuver away from dam removal. Recognizing that federal funding was necessary to serve its patrons, the District reluctantly began to discuss removal as a viable option.

Strong congressional delegation support is central to securing federal funding, and a unified voice from the local level asking for the project is key to congressional support. Therefore, in January 2000, GPID addressed the issue of federally funded dam removal with its 6,720 patrons. Removal won by a margin of more than 25 percent,¹⁵⁷

150. Final Order, supra note 67, at 21.

151. Id.

[SRD] is a source of 'take' of threatened coho salmon, which constitutes a violation of the ESA. The NMFS ... has consistently stated that dam removal must be a feature of any incidental take permit ... for continued operation. The record does not show that further study, rather than dam removal, is consistent with the ESA.

Id.

152. Id. at 22.

153. Grants Pass Irr. Dist. v. Water Res. Dep't, 1 P.3d 480 (Or. App. 2000).

154. Paul Fattig, GPID voters: Remove the Dam, MAIL TRIB., Jan. 19, 2000, at 1A, 4A.

155. See Final Order, supra note 67, at 22.

156. Peter Wong, *Politics Looms Large in Debate*, MAIL TRIB., Jan. 16, 2000, at 2A. In 1995, dam supporters asked the legislature to grant GPID 150 cfs in addition to its existing 96.94 cfs right, but backed off after Governor Kitzhaber threatened to veto the bill. In 1999, the Oregon Legislature passed a bill to grant an additional 71.79 cfs, without tying the additional appropriation to dam removal. The bill also would have required state legislature approval of dam removal, but Governor Kitzhaber vetoed the bill.

157. Fattig, *supra* note 154. Of 6,720 patrons in the district, 2,940 patrons returned their ballots (43%), while 31 ballots were ruled invalid, leaving 2,909 to decide the fate of the dam. A majority—1,821 to 1,088—supported removal. *Id.*

^{149.} Take Brief, *supra* note 46. Both parties have filed briefs, but the court has not rendered a decision as of this writing. In light of the volume of work the ESA has created, the fact that NMFS took an aggressive stance against GPID is a strong indicator of its commitment to rectifying the fish passage problems.

sending a DeVoto-esque¹⁵⁸ message to Congress: "Remove Savage Rapids Dam, but bring your wallet."

On October 23, 2000, Oregon Senators Gordon Smith and Ron Wyden introduced the Savage Rapids Dam Act of 2000.¹⁶⁰ The Act would provide \$22.2 million in federal funding¹⁶¹ to remove the aging dam and replace it with modern irrigation pumps while still insuring water delivery to district patrons.¹⁶² The proposal would authorize \$13.5 million for general dam removal costs,¹⁶³ \$3.7 million for acquisition of the dam,¹⁶⁴ \$2.5 million for riparian restoration,¹⁶⁵ and \$2.5 million for recreational improvements.¹⁶⁶ Although Senators Smith and Wyden will have to reintroduce the bill¹⁶⁷ in the 107th Congress, the bill's initial introduction may mark the beginning of the end of the decades long struggle over the fate of the Savage Rapids Dam.¹⁶⁸ In November, 2001, federal dollars aimed at removal began to flow: some \$500,000 for implementation studies on replacement pumps at SRD.¹⁶⁹

IV. COMING FULL CIRCLE: MEANING WHAT WE SAID 150 YEARS AGO

A number of factors have played a role in bringing the removal of SRD closer to hand. First, a dramatic river system, home to a storied Oregon salmon fishery, set the stage for a high profile conflict. Second, the listing of threatened and endangered salmon has mushroomed in the last decade, and served to increase public awareness of salmonid spawning and habitat needs. Third, a conservation oriented governor was in office, willing to veto legislative attempts to retain the dam despite the science and the costs. Fourth, dam proponents botched backroom deals. Fifth, an exceptionally committed not-for-profit staffer¹⁷⁰ spurred the charge. Sixth, studies from both sides of the issue determined dam removal was the least

164. Id. § 5(b).

^{158.} Bernard DeVoto is widely credited with the sharp-tongued adage about the attitudes of westerners toward the federal government as it applies to resources: "Get out and give us more money." See, e.g., CHARLES F. WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST 302 (1992).

^{159.} Fattig, supra note 154.

^{160.} Savage Rapids Dam Act of 2000, S. 3227, 106th Cong. (2000).

^{161.} Id. § 5.

^{162.} Id. § 2.

^{163.} Id. § 5(a).

^{165.} Savage Rapids Dam Act of 2000, S. 3227, 106th Cong. § 5(c) (2000).

^{166.} Id. § 5(d).

^{167.} Oregon Trout, WaterWatch, and other conservation groups are currently working to bring this about. In the meantime, NMFS will likely issue a temporary one-year incidental take permit to give GPID a chance to get federal legislation for dam removal passed.

^{168.} Bill Kettler, Bill Could Solve Struggle Over Dam, MAIL TRIB., Oct. 24, 2000, at 1A.

^{169.} Energy and Water Development Act of 2002, Pub. L. No. 107-66, 115 Stat. 486.

^{170.} Staff Attorney Bob Hunter has served for more than a decade as WaterWatch of Oregon's point person in the effort to remove Savage Rapids Dam.

Issue 1

costly, fastest, and most beneficial solution to the fish passage problem. And finally, legislation offered the prospect of significant federal funding, which would prevent harm to the irrigators during and after removal. Nevertheless, after all this, the dam remains.

But at the bottom, WRD's enforcement of beneficial use through a proof survey provided the relentless legal brush that painted the District into a corner with no options left but removal. By conditioning the District's water right on progress made toward improving fish passage, WRD insured removal of the dam. Furthermore, WRD honored the simple original intent of beneficial use—that beneficial use, without waste, is the basis, measure, and limit of a water right.¹⁷¹

Water users in the West may possess vested property rights in water, however, beneficial use limits attach to that right. This means western states can squeeze current usage to reduce inefficient practices. With dwindling salmon runs and a rapidly increasing population in the West, western states must begin to squeeze water efficiency earnestly in the years to come. Rigorously enforced, beneficial use can make available the water needed to meet future demands in the West. Only then will we carry what we have lifted;¹⁷² only then will we begin to fulfill the promise of the West.

^{171.} OR. REV. STAT. § 540.610(1) (1999).

^{172.} Wallace Stegner, *Water in the West: Growing Beyond Nature's Limits*, L.A. TIMES, Dec. 29, 1985, at V3. Stegner, railing against development's ruination of the fragile western habitat, asserted "[t]he West cannot carry what it has lifted." *Id.*