AVOIDING JEOPARDY, WITHOUT THE QUESTIONS: RECOVERY IMPLEMENTATION PROGRAMS FOR ENDANGERED SPECIES IN WESTERN RIVER BASINS

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The application of the Endangered Species Act to water resources has generated much controversy in the American West. In several western river basins, however, Recovery Implementation Programs (RIPs) provide an alternative, collaborative approach to ESA compliance. These programs offer an enhanced role for states and stakeholders in ESA decisionmaking, and increased certainty that ESA requirements will not disrupt ongoing water project operations and established uses. This Article examines the origins, purposes, and elements of various RIPs, with particular emphasis on these programs' approach to compliance with the requirements of ESA section 7 for federal agency actions. The Article also considers the legal and political successes achieved by RIPs, and concludes by posing and analyzing certain questions regarding the popularity and future of these programs.

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INTRODUCTION

When the Supreme Court decided *Tennessee Valley Authority v. Hill* in 1978,¹ it not only blocked completion of a nearly finished federal dam to save the endangered snail darter; it also elevated the Endangered Species Act (ESA)² into one of the nation's most powerful environmental laws, intended to "halt and reverse the trend toward species extinction, whatever the cost." Congress responded by ordering the completion of the dam, but largely preserved the relevant provision of the ESA. Congress later adopted a set of ESA amendments that included the following statement: "It is further declared to be the policy of Congress that Federal agencies shall

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^{1. 437} U.S. 153 (1978).

^{2. 16} U.S.C. §§ 1531–1544 (2006).

^{3.} Tenn. Valley Auth. v. Hill, 437 U.S. at 184.

^{4.} See Holly Doremus, The Story of TVA v. Hill: A Narrow Escape for a Broad New Law, in Environmental Law Stories 109, 132 (Richard J. Lazarus & Oliver A. Houck eds., 2005).

cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species."⁵

Despite this policy of cooperation, the record of water resource issues involving endangered species is filled with conflict, including some of the greatest controversies in the history of the ESA. For the most part, these controversies have involved federal water projects in the western United States, built and operated by the U.S. Bureau of Reclamation (USBR). The Klamath Basin water crisis, where many farmers on one of the oldest reclamation projects lost nearly their entire water supply in the drought year of 2001, was perhaps the most intense dispute. Two years later, a court of appeals holding that farmers and cities on the Rio Grande could lose "their" federal project water to an endangered minnow' sparked outrage in New Mexico; Albuquerque's mayor blasted both "the fringe environmental community, which . . . wants to take water from the mouths of our children" and "federal judges who are accountable to nobody in our society, who are not elected, who hide behind their nice robes and tall desks, [who] want to put the future of this community in jeopardy."8 The nation's hottest endangered species conflict today involves the Federal Central Valley Project in California, pitting the needs of endangered salmon and Delta smelt against irrigation and other traditional water uses. ESA requirements in the Central Valley have been heavily litigated for two decades, and the cases show no sign of stopping 10 — nor does the political controversy over limits on water deliveries.1

^{5. 16} U.S.C. § 1531(c)(2) (2006). There was a push in 1982 to weaken the ESA, and some members of Congress sought to insert a strong statement of deference to state water law into the Act, like the "Wallop Amendment" codified as § 101(g) of the Clean Water Act, 33 U.S.C. § 1251(g) (2006). That effort failed, however, leading to the policy statement regarding federal-state cooperation. A. Dan Tarlock, *The Endangered Species Act and Western Water Rights*, 20 LAND AND WATER L. REV. 1, 19 (1985).

^{6.} See Holly Doremus & A. Dan Tarlock, Water War in the Klamath Basin: Macho Law, Combat Biology, and Dirty Politics 1–4 (2008).

^{7.} Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109 (10th Cir. 2003), vacated as moot, 355 F.3d 1215 (10th Cir. 2004).

^{8.} See Reed D. Benson, So Much Conflict, Yet So Much In Common: Considering the Similarities Between Western Water Law and the Endangered Species Act, 44 NAT. RESOURCES J. 29, 63 (2004) (quoting Mayor Martin Chavez); see also Lara Katz, History of the Minnow Litigation and Its Implications for the Future of Reservoir Operations on the Rio Grande, 47 NAT. RESOURCES J. 675, 682 (2007) (stating that the court's ruling "was effectively a declaration of war for water users, the State, and politicians ").

^{9.} See, e.g., Madera Irrigation Dist. v. Hancock, 985 F.2d 1397 (9th Cir. 1993) (application of ESA to water contract renewals); O'Neill v. United States, 50 F.3d 677 (9th Cir. 1995) (USBR authority to reduce water deliveries to comply with ESA); Tulare Lake Basin Water Storage Dist. v. United States, 49 Fed. Cl. 313 (2001) (ESA restrictions on water deliveries as taking of property).

^{10.} See, e.g., Natural Res. Def. Council v. Salazar, 686 F.3d 1092 (9th Cir. 2012) (addressing the applicability of the ESA to certain water supply contracts); Consol. Salmonid

Other parts of the West, however, have indeed seen cooperation among federal, state, and local entities over ESA issues involving water resources. In the Upper Colorado River Basin, the federal government has worked cooperatively with three states, water users, and conservation groups for twenty-five years under a program that seeks to protect both water users and endangered species. 12 The San Juan River Basin has had a very similar program since 1992, 13 and in the Platte River Basin, a cooperative program was initiated in 1997¹⁴ and finalized in 2006. ¹⁵ In each of these basins, ESA compliance for USBR project operations and other activities has been governed by a Recovery Implementation Plan (RIP). These programs seek to allow continued water use and development while also implementing certain measures to benefit endangered fish and bird species that live in and along the Upper Colorado, San Juan, and Platte Rivers. Every one of these established programs has provided years of ESA compliance for waterrelated activities, with little controversy and no litigation—and a brand new RIP seeks to do the same in New Mexico's Middle Rio Grande Basin.¹⁶

RIPs are not off-the-shelf ESA products; unlike critical habitat designations or biological opinions, they do not specifically appear in the statute

Cases, 713 F. Supp. 2d 1116 (E.D. Cal. 2010); Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021 (E.D. Cal. 2010) (both addressing validity of ESA biological opinions regarding Central Valley Project operations).

- 11. For example, the Water and Power Subcommittee of the U.S. House Natural Resources Committee calls the Central Valley situation a "man-made drought," and blames court decisions requiring allocation of water to endangered fish. Because of this situation, the Subcommittee's website says, "the San Joaquin Valley is in danger of becoming a dust bowl unless immediate action is taken to change policies that put the needs of fish above the livelihood of people." *The Man-Made California Drought*, NATURAL RES. COMM., http://www.naturalresources.house.gov/issues/issue/?IssueID=5921 (last visited Sept. 5, 2012).
- 12. U.S. DEP'T OF THE INTERIOR, FISH & WILDLIFE SERV., FINAL RECOVERY IMPLEMENTATION PROGRAM FOR ENDANGERED FISH SPECIES IN THE UPPER COLORADO RIVER BASIN (1987) [hereinafter Upper Colorado RIP Program Document].
- 13. SAN JUAN RIVER BASIN RECOVERY IMPLEMENTATION PROGRAM, FINAL PROGRAM DOCUMENT (2010), available at www.fws.gov/southwest/sjrip/pdf/DOC_Final_Program_Document_appendices_2010.pdf [hereinafter San Juan RIP Program Document].
- 14. COOPERATIVE AGREEMENT FOR PLATTE RIVER RESEARCH AND OTHER EFFORTS RELATING TO ENDANGERED SPECIES HABITATS ALONG THE CENTRAL PLATTE RIVER, NEBRASKA (1997), available at https://platteriverprogram.org/PubsAndData/ProgramLibrary/Cooperative%20Agreement%20for%20Central%20Platte%20River.pdf.
- 15. PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM COOPERATIVE AGREEMENT (2006), available at https://www.platteriverprogram.org/pubsanddata/programlibrary/cooperative%20agreement%20for%20central%20platte%20river.pdf.
- 16. MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM, DRAFT MIDDLE RIO GRANDE COLLABORATIVE RECOVERY IMPLEMENTATION PROGRAM (RIP) DOCUMENT, 3 (July 2012 Draft) [hereinafter Middle Rio Grande RIP Draft Program Document] (on file with author).

or even the implementing rules.¹⁷ Thus, RIPs have no official definition, but have been described as "voluntary, multi-stakeholder initiatives developed by the [U.S. Fish and Wildlife Service] that seek to balance water use and development with the recovery of federally-listed species." This description is generally accurate, but no two RIPs are quite alike in their composition, objectives, and operations. For example, unlike the four RIPs identified in the previous paragraph, at least two others—the Recovery Implementation Committee in the Missouri River Basin¹⁹ and the Edwards Aquifer RIP in Texas²⁰—are not relied upon to ensure ongoing ESA compliance in the operation of federal water projects, ²¹ and therefore these relatively new programs²² are not considered in this article. Another general observation about RIPs is that they are found only in western waters, primarily river systems with major federal water projects. In other words, all of the existing RIPs relate to the management and use of water resources in the western United States.²³

^{17.} See infra notes 70–73 (critical habitat designations), 95-101 (biological opinions), and accompanying text. The ESA does provide for recovery plans (see infra notes 73–86 and accompanying text), but nothing in statute or rule suggests that these plans would lead to official programs involving multiple sovereigns, formal governance structures, and multimillion dollar budgets, as the RIPs have become. See infra Part III.A (describing various aspects of RIPs).

^{18.} ROBERT GULLEY, EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM (EARIP) 2 (Mar. 25, 2010), available at http://www.edwardsrip.org/pdfs/eariphistory March2010.pdf.

^{19.} MISSOURI RIVER RECOVERY IMPLEMENTATION COMM., MISSOURI RIVER RECOVERY IMPLEMENTATION COMMITTEE FACT SHEET (2011), available at http://www.moriverrecovery.org/mrrp/f?p=136:32:0::NO:::: (last visited Jan. 24, 2013).

^{20.} ROBERT GULLEY, EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM (EARIP) SUMMARY (Mar. 25, 2010), available at http://www.edwardsrip.org/pdfs/eariphistory March2010.pdf.

^{21.} The Edwards Aquifer RIP produced a Habitat Conservation Plan to ensure take coverage for non-federal actions under ESA section 10, rather than providing compliance for federal agency actions under section 7. *Id.* This effort was rewarded when the FWS recently approved a section 10 permit based on the plan developed by the RIP. Edwards Aquifer Recovery Implementation Program Habitat Conservation Plan, 78 Fed. Reg. 11218 (Feb. 15, 2013). The Missouri River Recovery Implementation Committee is heavily involved in developing and implementing an adaptive management program regarding Missouri River operations and habitat, and although it grew out of a 2003 consultation on Missouri River operations, it is not designed to ensure section 7 compliance for ongoing or new activities in the basin. Telephone Interview with Michael Thabault, Ass't Regional Director for Ecological Services, U.S. Fish & Wildlife Service, in Denver, Colo. (Sept. 5, 2012). Mr. Thabault has primary oversight of all major water-related recovery programs covered by the Service's Denver regional office, including those on the Missouri, Platte, and Upper Colorado.

^{22.} Both the Missouri River and Edwards Aquifer RIPs were established in the mid-2000s. See infra notes 208-209 and accompanying text.

^{23.} Telephone Interview with Michael Thabault, supra note 21.

This Article addresses Recovery Implementation Programs for endangered species in the context of four western river basins where the USBR is a key water supplier and manager. Rather than focus in detail on any particular program, this Article addresses these RIPs as a group, representing a unique approach to ESA compliance that has taken root in the western water context. Part I of this Article provides context, outlining federal and state roles regarding water resources in the West. Part II explains the requirements of the ESA, focusing on federal agency obligations under section 7 and summarizing three situations where these requirements have applied to USBR project operations. Part III explains the structure, purposes, and elements of four RIPs; examines some key differences between these programs and the usual ESA approach in the water context; and notes the success of these programs in legal terms. Part IV attempts to answer three broad questions about RIPs: why they have caught on in the western water context, whether they can actually recover species, and whether they are likely to become even more popular.

I. FEDERAL AND STATE ROLES REGARDING WATER DEVELOPMENT IN THE WEST

A. Federalism in Water Law

Water law in the western United States is primarily state law, and the western states have generally allocated water under the doctrine of prior appropriation.²⁴ This system recognizes water rights based on application of water to a "beneficial use," and such rights last forever so long as they continue to be exercised;²⁵ in times of shortage, the oldest water rights take priority over those established later.²⁶ By providing secure entitlements to

^{24.} As the Western Governors Association recently stated, "States have the pivotal role in allocating, administering, protecting, and developing water resources" W. GOVERNORS ASS'N, WATER RESOURCE MANAGEMENT IN THE WEST 1 (2011), available at http://www.westgov.org/policies/doc_download/1441-11-7.pdf (last visited Jan. 27, 2013). The western states have striven to maintain primacy since the 1800s. See generally California v. United States, 438 U.S. 645, 653–70 (1978) (describing history of federal-state relations in western water law through the 1902 Reclamation Act, emphasizing the views of western states and congressmen regarding state control of water resources). The Western Governors Association remains fully committed to protecting state authority over water.

^{25.} See Janet C. Neuman, Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use, 28 ENVIL. L. 919, 920 (1998).

^{26.} See A. Dan Tarlock, Prior Appropriation: Rule, Principle, or Rhetoric?, 76 N.D. L. REV. 881, 881 (2000) (calling the principle of senior uses taking priority over junior uses "the central dogma of western water law").

water use, western water law has sought to promote water development for productive uses such as irrigation, industry, and municipal water supply.²⁷

In managing water, however, the western states have been forced to share power with the federal government. Although the Supreme Court has stated that the history of western water law reveals a "consistent thread of purposeful and continued deference to state water law by Congress," that remark is at best misleading about the significance of federal law in this context. In reality, federal law has limited state water allocation authority since at least 1899, when the Supreme Court upheld the power of the national government to block a new dam on the Rio Grande that had already been approved by New Mexico. While acknowledging that Congress had largely left water allocation in state hands, the Court affirmed federal power to protect navigation, and also declared that "a State cannot by its legislation destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its waters, so far, at least as may be necessary for the beneficial uses of the government property."

This latter statement foreshadowed the Court's 1908 decision in *Winters v. United States*, ³² holding that an Indian reservation in Montana had a water right based on federal law; the treaty establishing the Fort Belknap Reservation said nothing about water, but the Court determined that an irrigation water right was necessary to fulfill the purposes of that treaty. ³³ *Winters* established that the federal government could claim water rights for Indian reservations for the amount of water needed to serve the purpose(s) for which they were created. ³⁴ For decades it was thought that the *Winters*

^{27.} See Cal. Or. Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 154 (1935) (explaining the western states' choice of prior appropriation to provide water for manufacturing, irrigation, and mining purposes), 157–58 (declaring that the choice of prior appropriation allowed the West to develop, and "became the determining factor in the long struggle to expunge from our vocabulary the legend 'Great American Desert,' which was spread in large letters across the face of the old maps of the far west").

^{28.} California v. United States, 438 U.S. at 653.

^{29.} See David H. Getches, The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States' Role?, 20 STAN. ENVTL. L.J. 3, 6 (2001) (calling federal deference to state water law a "myth"); Reed D. Benson, Deflating the Deference Myth: National Interests vs. State Authority under Federal Laws Affecting Water Use, 2006 UTAH L. REV. 241, 249 ("Congress and the Supreme Court have generally refused to cede control over water to the states if there was a potential conflict with an important national interest such as navigation, hydropower development, federal reclamation policy, or more recently, environmental protection.").

^{30.} United States v. Rio Grande Dam and Irrigation Co., 174 U.S. 690 (1899).

^{31.} Id. at 703.

^{32. 207} U.S. 564 (1908).

^{33.} *Id.* at 576.

^{34.} See Arizona v. California, 373 U.S. 546, 597-600 (1963).

doctrine was limited to Indian country,³⁵ but the Supreme Court signaled in 1955 that it might extend to other federal lands designated for a particular purpose.³⁶ The prospect of "federal reserved water rights" for tribal *and* federal lands raised serious concerns in the western states,³⁷ both before and after the Supreme Court confirmed that the United States could claim them for national lands such as parks, forests, and wildlife refuges.³⁸ Not only did federal water rights jeopardize state control over water allocation, they also threatened to disrupt existing water uses, because many Indian reservations and federal land designations predated water rights (for irrigation and other uses) established under state law.³⁹

Even though the *Winters* doctrine provides a clear legal basis for federal water rights for federal and tribal lands, the western states have largely been able to minimize the practical impact of reserved right claims. A key reason for the states' success is a series of Supreme Court decisions interpreting a federal statute known as the McCarran Amendment,⁴⁰ and holding, in effect, that the purposes of this law are ordinarily best served by having federal and tribal water right claims heard in state courts.⁴¹ Since these cases, federal and tribal water claims have been heard almost exclusively in

^{35.} See Frank J. Trelease, Federal Reserved Water Rights Since PLLRC, 54 DENV. U. L. REV. 473, 475 (1977) (stating that the author never heard it suggested before 1955 that the reserved rights doctrine applied to non-Indian lands).

^{36.} Federal Power Comm'n v. Oregon, 349 U.S. 435, 446-47 (1955).

^{37.} See Cappaert v. United States, 426 U.S. 128, 145 (1976) (noting that bills had been introduced in Congress to require at least some federal water uses to obtain water rights exclusively under state law, but none had passed). Such bills are discussed extensively in Eva H. Morreale, Federal-State Conflicts over Western Waters—A Decade of Attempted "Clarifying Legislation," 20 RUTGERS L. REV. 423, 446–512 (1966).

^{38.} *Id.* at 601.

^{39.} See John E. Thorson, Ramsey L. Kropf, Andrea K. Gerlak and Dar Crammond, Dividing Western Waters: A Century of Adjudicating Rivers and Streams, Part II, 9 U. DENV. WATER L. REV. 299, 306–12 (explaining concerns of western states and water users with potential implications of federal and tribal reserved rights).

^{40.} This 1952 appropriations rider, codified at 43 U.S.C. § 666 (2006), waived federal sovereign immunity for the United States to be joined in general stream adjudications in state courts. These cases typically involve large numbers of water right claims in a particular stream system, and the McCarran Amendment was intended to allow federal claims to be heard in the same proceedings as private claims under state law. See Colorado River Water Conservation Dist. v. United States, 424 U.S. 800, 810–11 (1976) (discussing legislative history). The statute did not clearly address reserved right claims, however, and made no mention of U.S. claims on behalf of tribes.

^{41.} For a fuller discussion of these cases, see Benson, supra note 2929, at 268–72; Thorson, supra note 39, at 334–37 (both summarizing and interpreting United States v. District Court in and for the County of Eagle, 401 U.S. 520 (1971); Colorado River Water Conservation District v. United States, 424 U.S. 800 (1976); and Arizona v. San Carlos Apache Tribe, 463 U.S. 545 (1983)).

state courts, 42 which are widely seen as less advantageous for such claims. 43 In reality, however, tribal reserved right claims have usually been resolved through settlement rather than litigation, 44 typically following years of negotiations involving federal, tribal, and state representatives and sometimes other stakeholders too; 45 these settlements have typically made significant sums of (mostly federal) money available to the tribes for water and economic development, and have also protected non-Indian water users from harm they may otherwise have faced from recognition of senior tribal rights. 46 "Subordination" of senior tribal claims to existing (and sometimes even future) non-Indian uses can be a bitter pill for tribes to swallow, 47 but it satisfies a top priority of states: ensuring certainty for their water users.

Even when they have turned to the national government for assistance—in the form of federal water projects to supply water for irrigation and other purposes—the western states have sought to retain maximum authority over their water resources. Thus, when Congress enacted the 1902

^{42.} See Thorson et al., supra note 39, at 337 (stating that after these Supreme Court cases, western states launched water right adjudications "with the grim conviction that federal reserved [water] rights did in fact exist, a concern somewhat softened by the fact that most of these rights would be determined in a forum perceived to be more favorable: state court"). Only two states, Nevada and New Mexico, have significant water adjudications in federal court. *Id.* at 351, 361.

^{43.} Id. at 337, 333 (noting that states feared adjudication of federal and tribal claims in federal courts, while federal and tribal attorneys feared state court adjudication); Michael C. Blumm, Reversing the Winters Doctrine? Denying Reserved Water Rights for Idaho Wilderness and Its Implications, 73 U. COLO. L. REV. 173, 178 (2002) (asserting, in an article focusing on nontribal reserved right claims, that state courts "have proved largely hostile to reserved rights"); Michael C. Blumm, David H. Becker, and Joshua Smith, The Mirage of Indian Reserved Rights and Western Streamflow Restoration in the McCarran Amendment Era: A Promise Unfulfilled, 36 ENVTL. L. 1157, 1201 (2006) ("The six cases examined in this study reveal that ... misgivings about states' ability to provide a neutral forum for adjudicating tribal reserved water rights were well justified.").

^{44.} Jeanne S. Whiting, *Indian Water Rights: The Era of Settlement, in The Future of Indian and Federal Reserved Water Rights: The Winters Centennial* 136–37 (Barbara Cosens & Judith V. Royster eds., 2012) (noting more than twenty tribal water right settlements between 1978 and 2008, but only two sets of tribal reserved rights determined through litigation in that time).

^{45.} *Id.* at 139 (describing parties to reserved right settlement negotiations, and explaining federal participation).

^{46.} *Id.* at 138 (describing benefits of settlement, including various ways to determine tribal rights "while also ameliorating impacts to existing water users").

^{47.} See A. DAN TARLOCK ET AL., WATER RESOURCE MANAGEMENT: A CASEBOOK IN LAW AND PUBLIC POLICY 927 (6th ed. 2009).

^{48.} *Id.* at 924 ("Non-Indian water users and state water administrators generally seek certainty of rights and maximum protection of existing uses, particularly by appropriators junior to the tribe whose interests are exposed in litigation."). Federal officials, too, may want to see existing users protected. *Id.* ("The federal government seeks to mollify political constituencies allied with non-Indians and state authorities, but within the constraints of its trust responsibility to the tribes.").

Reclamation Act⁴⁹ authorizing the U.S. Department of the Interior (Interior) to construct irrigation projects in the West, it included a provision recognizing state water laws and water rights, and requiring the federal government "to proceed in conformity with such laws" in carrying out the program.⁵⁰ Thus, the states largely retained their role controlling water allocation and use, even as water development in the West increasingly was driven by Congress and the USBR.

B. Federal Reclamation Projects and Their Operations

The Reclamation Act authorized the Interior Secretary to build "irrigation works for the storage, diversion, and development of waters"51 in the western states and territories. As originally conceived, these projects would supply irrigation water to farmers who would settle on designated lands and "reclaim" them for irrigated agriculture, repaying the government's construction costs over a ten-year period. 52 The USBR's influence grew, however, as the reclamation program expanded to serve new purposes. By 1939, Congress had recognized that reclamation projects could serve multiple purposes, including hydropower, flood control, navigation, municipal water supply, and other "miscellaneous purposes." Historian Donald Pisani wrote that the "High Dam Era" of the 1930s, with its large multipurpose projects, made the USBR "the most important federal agency in the West. From 1930 to 1970 the water and power provided by the bureau transformed the region "54 Today, reclamation projects deliver irrigation water to 10 million acres and one-fifth of the West's farmers, generate enough hydropower to serve 3.5 million homes, provide municipal water

^{49.} Act of June 17, 1902, ch. 1093, 32 Stat. 388 (codified at scattered sections of 43 U.S.C. from $\S\S$ 371–498).

^{50.} This requirement is found in section 8 of the 1902 Act, (codified at 43 U.S.C. §§ 372, 383 (2006)). Western states and water users had pushed for even greater state control of the federal reclamation program. See DONALD J. PISANI, TO RECLAIM A DIVIDED WEST: WATER, LAW, AND PUBLIC POLICY, 1848-1902 at 298-319 (1992) (explaining efforts of western members of Congress to enact a federal irrigation program that would be controlled by the states rather than the national government).

^{51.} Act of June 17, 1902 § 2 (codified at 43 U.S.C. § 411 (2006)).

^{52.} *Id.* §§ 4−5.

^{53.} Reclamation Project Act of 1939, ch. 418, § 9(a), 53 Stat. 1187, 1193 (1939) (codified at 43 U.S.C. § 485h(a) (2006)). Well before 1939, however, Congress was already authorizing reclamation projects for multiple purposes; for example, the Boulder Canyon Project Act authorized construction of Boulder (Hoover) Dam for purposes of river regulation, improvement of navigation, flood control, "irrigation and domestic uses, and satisfaction of present perfected rights," and also provided for hydropower development at the dam. Act of December 21, 1928, ch. 42, § 6, 45 Stat. 1057, 1061.

^{54.} Donald J. Pisani, Federal Reclamation Law in the Twentieth Century: A Centennial Retrospective, in The Bureau of Reclamation: History Essays from the Centennial Symposium Volumes I and II 611, 611 (2008).

supplies serving 31 million people, and provide 90 million visitor-days of recreation. 55

From the beginning, the USBR was to manage and operate project reservoirs, ⁵⁶ and today it operates nearly 350 of them ⁵⁷ in seventeen western states. ⁵⁸ The operation of a particular project is governed largely by the statute(s) authorizing that project, and by the contracts under which the project supplies water for certain uses. ⁵⁹ Authorizing statutes specify (among other things) the purposes for which the project is to be constructed and operated, such as irrigation, hydropower, and recreation. ⁶⁰ The specific water supply obligations of a project are governed by contracts between the USBR and an entity such as an irrigation district or a municipality, ⁶¹ which in turn delivers the water to end users such as irrigators or homeowners.

Operation of these reservoirs, however, creates a variety of serious and ongoing environmental impacts throughout the West. Most notably, reservoir operations change the quantity, quality, and timing of downstream river flows, often damaging aquatic ecosystems and harming native species.⁶²

for the principal purposes of storing, regulating, and furnishing water for municipal, domestic, and industrial use, and, for the irrigation of approximately twenty-six thousand acres of land and of controlling floods and, as incidents to the foregoing for the additional purposes of regulating the flow of the Washita River, providing for the preservation and propagation of fish and wildlife, and of enhancing recreational opportunities.

Act of February 25, 1956, ch. 71, § 1, 70 Stat. 28.

Of all the environmental changes wrought by dam construction and operation, the alteration of natural water flow regimes has had the most pervasive and damaging effects on river ecosystems and species (Poff et al. 1997, Postel and Richter 2003). Below we discuss the ways that dam operations induce hydrologic changes, the nature of which is strongly influenced by the operating purposes of the dam.

^{55.} Bureau of Reclamation-About Us, U.S. BUREAU OF RECLAMATION, http://www.usbr.gov/main/about/index.html (last visited Aug. 30, 2012).

^{56.} Act of June 17, 1902 § 6 (codified at 43 U.S.C. § 498 (2006)).

^{57.} Bureau of Reclamation Facts & Information, U.S. BUREAU OF RECLAMATION, http://www.usbr.gov/main/about/fact.html (last visited Aug. 30, 2012).

^{58.} The seventeen Reclamation states are the six Great Plains states from North Dakota down to Texas, the three West Coast states, and the eight states of the Interior West. 43 U.S.C. § 391 (2006).

^{59.} For a general overview of these arrangements governing reclamation project water, see Reed D. Benson, Whose Water Is It? Private Rights and Public Authority over Reclamation Project Water, 16 VA. ENVTL. L.J. 363 (1997).

^{60.} For example, Congress authorized the multipurpose Washita Basin Project in Oklahoma

^{61.} See 2 WATERS & WATER RIGHTS § 41.05(c) (Robert E. Beck & Amy K. Kelley eds., 3rd ed. 2009) (discussing the Bureau's water delivery obligations under its water supply contracts).

^{62.} Richter and Thomas summarize the typical downstream effects of dams (not necessary Bureau dams) as follows:

Indeed, a 1996 study of counties in the western United States "found that the number of ESA-listed fish species in a county correlated positively with the level of irrigated agriculture reliant on surface water in the county. In particular, the number of species depended positively on water-supply levels of the Bureau of Reclamation." In other words, the more water delivered by USBR projects in a particular area, the more threatened or endangered fish species in that area. This correlation between reclamation projects and listed species has made the ESA an increasingly major factor in USBR's operations, as discussed in the next section.

II. THE ENDANGERED SPECIES ACT AND ITS APPLICATION TO FEDERAL WATER PROJECTS

Enacted in 1973, the ESA is one of the nation's most important and controversial environmental laws. The ESA's purpose is to conserve endangered and threatened species⁶⁴ and the ecosystems on which they depend.⁶⁵ As the Supreme Court stated, "[E]xamination of the language, history, and structure of the legislation . . . indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities."⁶⁶ All federal agencies have ESA duties, but the two most responsible for deter-

Dams can heavily modify the volume of water flowing downstream, change the timing, frequency, and duration of high and low flows, and alter the natural rates at which rivers rise and fall during runoff events. Although much has been written about the ecological consequences of hydrologic alteration, Bunn and Arthington (2002) summarize their review of this literature by highlighting four primary ecological impacts associated with flow alteration: (1) because river flow shapes physical habitats such as riffles, pools, and bars in rivers and floodplains, and thereby determines biotic composition, flow alteration can lead to severely modified channel and floodplain habitats; (2) aquatic species have evolved life history strategies, such as their timing of reproduction, in direct response to natural flow regimes, which can be de-synchronized through flow alteration; (3) many species are highly dependent upon lateral and longitudinal hydraulic connectivity, which can be broken through flow alteration; and (4) the invasion of exotic and introduced species in river systems can be facilitated by flow alteration.

Brian D. Richter & Gregory A. Thomas, *Restoring Environmental Flows by Modifying Dam Operations*, 12(1) ECOLOGY & SOC'Y 12 (2007), *available at* http://www.ecologyandsociety.org/vol12/iss1/art12 (last visited Sept. 16, 2010).

- 63. Michael R. Moore et al., Water Allocation in the American West: Endangered Fish Versus Irrigated Agriculture, 36 NAT. RESOURCES J. 319, 348 (1996).
- 64. 16 U.S.C. § 1532 (2006). 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.
 - 65. *Id.* § 1531(b).
 - 66. Tenn. Valley Auth. v. Hill, 437 U.S. 153, 174 (1978).

mining the status and needs of imperiled species are the U.S. Fish and Wildlife Service (FWS) within the Interior, and for oceangoing species such as salmon, the National Marine Fisheries Service (NMFS) within the Department of Commerce (together, "the Services").

A. Key Provisions of the ESA

1. Section 4: Species Listing and Recovery Planning

Section 4 of the ESA largely deals with decisions regarding the listing of species as threatened or endangered. The statute requires the FWS or NMFS to make such decisions through notice-and-comment rulemaking, Section 4 also calls on the relevant Service to designate critical habitat for each species at the time of listing, using the same process and the same information as in listing decisions, but also taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. Thus, section 4 requires the relevant Service to determine which species, and which habitat for these species, require protection.

In addition, ESA section 4(f) requires the relevant Service "to develop and implement plans . . . for the conservation and survival" of listed species. ⁷³ Such recovery plans must contain site-specific management actions for the conservation and survival of the species, specific criteria for de-listing the species, and estimates of the time and money required to carry out the identified measures. ⁷⁴ No rulemaking process is required, although the relevant Service must provide for public notice and comment before adopting a recovery plan, and must consider all information provided during the comment period. ⁷⁵

Although the statute mandates that the relevant Service "develop and implement" recovery plans, ⁷⁶ the plans themselves have limited legal signif-

^{67. 16} U.S.C. § 1533 (2006).

^{68.} *Id.* § 1533(a)(1), 1533(b)(4).

^{69.} *Id.* § 1533(b)(1).

^{70.} The statute defines critical habitat in some detail, but the key requirement is that the habitat be "essential for the conservation of the species." *Id.* § 1532(5).

^{71.} The requirement for critical habitat designation at the time of listing is not absolute. See id. 1533(b)(6)(C).

^{72.} *Id.* § 1533(b)(2).

^{73.} *Id.* § 1533(f)(1). This requirement applies unless the Service determines that a plan would not promote the conservation of the species. *Id.*

^{74.} *Id.* § 1533(f)(1)(B).

^{75.} *Id.* § 1533(f)(4).

^{76.} *Id.* § 1533(f)(1).

icance. As Federico Cheever wrote in his thorough 1996 analysis of the role and significance of recovery plans, section 4(f) "does not require that recovery plans have the force of law or that the duties they impose bind federal agencies or anyone else." And while Cheever argued for a greater focus on recovery and recovery planning in ESA implementation, he acknowledged that the courts had generally been unwilling to find such plans directly enforceable. The Services' recovery planning guidance clearly states that recovery plans are nonbinding, but they provide the "central organizing tool for guiding each species' recovery process." **

Section 4(f) allows the relevant Services to appoint "recovery teams" involving "appropriate public and private agencies and institutions, and other qualified persons" for purposes of developing and implementing recovery plans. The statute itself says little else about recovery teams, leaving the Secretary with great discretion regarding the formation and composition of a recovery team for a particular species. The Services' recovery planning guidance offers far more detail, identifying circumstances where recovery teams may be appropriate, and listing both the advantages and disadvantages for recovery teams. This guidance suggests that recovery teams should not always be used; by contrast, the Services have a longstanding policy of seeking state agency involvement in recovery plan development and, especially, implementation.

^{77.} Federico Cheever, The Road to Recovery: A New Way of Thinking About the Endangered Species Act, 23 ECOLOGY L.Q. 1, 59 (1996).

^{78.} *Id.* at 72–75.

^{79.} *Id.* at 59–63 (discussing and citing three cases holding recovery plans unenforceable).

^{80.} NAT'L MARINE FISHERIES SERV. & U.S. FISH & WILDLIFE SERV., INTERIM ENDANGERED AND THREATENED SPECIES RECOVERY PLANNING GUIDANCE VERSION 1.3, § 1.1.1 (2010) [hereinafter RECOVERY PLANNING GUIDANCE].

^{81. 16} U.S.C. § 1533(f)(2) (2006).

^{82.} In the absence of a recovery team, a recovery plan may be prepared by Service biologists or by a contractor. RECOVERY PLANNING GUIDANCE, *supra* note 80, at §§ 2.3.2.2, 2.3.2.3.

^{83. &}quot;Recovery teams are often appropriate for more wide-ranging species, more controversial issues, and larger-scope plans." *Id.* at Box 2.3.2.4.

^{84.} Listed advantages include, among others, "increase the depth of expertise (biological and otherwise) contributing to plan development," "address and resolve controversial issues early in the process," and "facilitate the implementation of recovery actions." *Id.* § 2.3.2.4.

^{85.} Listed disadvantages include, among others, "a tendency for unwieldy and non-productive meetings," "difficulties bridging knowledge gaps among scientists, agency representatives, and other stakeholders," and "more complications in recovery plan development due to diverse viewpoints and sheer number of opinions." *Id.*

^{86.} The policy calls for the Services to "[u]tilize the expertise and solicit the information and participation of State agencies" in developing and implementing recovery plans. As to implementation, the policy continues, "State agencies have the capabilities to carry out many of the actions identified in recovery plans and are in an excellent position to do so because of their close working relationships with local governments and landowners."

2. Section 7: Consultation on Federal Actions to Avoid Jeopardizing Species

ESA section 7 imposes special obligations, both substantive and procedural, on federal agencies.⁸⁷ Most important is section 7(a)(2), which commands 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.88 The statute does not define the crucial "jeopardy" term, but under the ESA implementing rules, the term means "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species."89 The Supreme Court in TVA v. Hill declared that this provision showed "beyond doubt that Congress intended endangered species to be afforded the highest of priorities."90 Although this case may have been the ESA's high water mark (at least in the Supreme Court), 91 the jeopardy prohibition of section 7 has remained one of the strongest standards in environmental law.

Section 7(a)(2) couples the substantive standard of "no jeopardy" with the mandatory process of "consultation." The Ninth Circuit has explained the consultation triggers and process 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." 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. Formal consultation requires that the consulting agency . . . issue a

Endangered and Threatened Wildlife and Plants: Interagency Policy Regarding Role of State Agencies in ESA Activities, 59 Fed. Reg. 34,274, 34,275, E.1, E.2 (Jul. 1, 1994) [hereinafter ESA state agency policy].

^{87. 16} U.S.C. § 1536 (2006).

^{88.} Id. § 1536(a)(2).

^{89. 50} C.F.R. § 402.02 (2012).

^{90.} Tenn. Valley Auth. v. Hill, 437 U.S. 153, 174 (1978).

^{91.} See J.B. Ruhl, The Endangered Species Act's Fall from Grace in the Supreme Court, 36 HARV. ENVTL. L. REV. 487, 490 (2012) ("Hill has become the extreme outlier in the Court's ESA jurisprudence.").

^{92. 16} U.S.C. § 1536(a)(2) (2006).

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. ⁹³

Section 7(a)(2) requires federal agencies to use the best available commercial and scientific data in carrying out its requirements, 94 and does not provide for consideration of economic factors. 95 Under an ESA implementing rule, however, section 7 applies only to "discretionary" federal actions. 96

If the FWS determines in its Biological Opinion (BO) that the proposed action may jeopardize the species or impair critical habitat, it must suggest a "reasonable and prudent alternative" (RPA) to avoid jeopardy while meeting the purposes of the proposal. ⁹⁷ The ESA implementing rules define RPAs as "alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purposes of the action," that are within the action agency's authority and jurisdiction, that are "economically and technologically feasible, and that the Director believes would avoid the likelihood" of jeopardizing the species or impairing critical habitat. ⁹⁸ The rules provide that a "jeopardy" BO must include an RPA unless the FWS is unable to identify one. ⁹⁹

Although they say little about the required content of RPAs, the rules provide some detail about the process of developing them. First, they require the FWS to "discuss" the availability of an RPA with the action agency, along with any applicant seeking approval from that agency. Second, they state that the FWS "will utilize the expertise" of the action

^{93.} Pac. Rivers Council v. Thomas, 30 F.3d 1050, 1054 n.8 (9th Cir. 1994) (citations omitted).

^{94. 16} U.S.C. § 1536(a)(2) (2006).

^{95.} By contrast, designation of critical habitat requires use of the best available scientific data, but also consideration of economic impacts, national security impacts, and other relevant impacts associated with designating a particular area. *Id.* § 1533(b)(2).

^{96. &}quot;Section 7 and the requirements of this part [of the ESA implementing rules] apply to all actions in which there is discretionary federal involvement or control." 50 C.F.R. § 402.03 (2012); see Reed D. Benson, Dams, Duties, and Discretion: Bureau of Reclamation Water Project Operations and the Endangered Species Act, 33 COLUM. J. ENVTL. L. 1, 3-4 (2008) (explaining the Supreme Court case upholding this rule, and analyzing its implications for USBR project operations).

^{97. 16} U.S.C. § 1632(b)(3)(A) (2006).

^{98. 50} C.F.R. § 402.02 (2012).

^{99.} *Id.* § 402.14(h)(3). The ESA implementing rules further provide that after a BO is issued, the action agency "shall determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion," and shall notify the Service of its final decision. *Id.* § 402.15.

^{100.} *Id.* § 402.14(g)(5). The rules define "applicant" as any person "who requires formal approval or authorization from a federal agency as a prerequisite to conducting the action." *Id.* § 402.02.

agency and any applicant in identifying RPAs.¹⁰¹ Third, they require the FWS to make its draft BO available to the action agency upon request, to allow the agency to analyze the RPA(s); the agency may then provide comments to the FWS.¹⁰² Finally, they provide that in formulating the BO, including any RPAs, the FWS "will give appropriate consideration to any beneficial actions taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation."¹⁰³

Thus, the consultation rules contemplate participation by three entities: the FWS, the action agency, and the applicant (if any). Unlike species listing determinations under section 4, there is no notice-and-comment process that offers an opportunity for stakeholders or interested citizens to participate. And in contrast to the development and implementation of recovery plans, there is no general policy providing for participation by state agencies in the consultation process or the development of RPAs. 105

3. Provisions Regarding "Take" of Listed Animals

Once a species is listed as threatened or endangered, section 9 of the ESA prohibits "take" of any member of a protected species of fish or wild-life. This prohibition applies to "any person," and the ESA defines "person" to include virtually any conceivable entity, including a federal agency. Under the ESA, "'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." FWS by rule has defined "harm" in this context to include "significant habitat modification or degradation where it actually kills or injures wildlife," thus bringing some habitat destruction within the prohibition of take.

^{101.} *Id.* § 402.14(g)(5).

^{102.} *Id.* The applicant may request a copy of the draft BO from the action agency, and may submit comments on the BO. *Id.*

^{103.} *Id.* § 402.14(g)(8).

^{104.} See 16 U.S.C. § 1533(b)(4) (2006) (requiring notice-and-comment rulemaking procedures for most listing decisions).

^{105.} The Services have a policy of seeking *information* from state agencies in the process of developing BOs. ESA state agency policy, *supra* note 86, at 34,275, C.1, C.2. In the recovery planning context, however, the policy calls on the Services to seek *participation* as well as information from state agencies, and to utilize their expertise. *Id.* at E.1, E.2.

^{106. 16} U.S.C. § 1538(a)(1)(B) (2006).

^{107.} Id. § 1538(a)(1).

^{108.} *Id.* § 1532(13).

^{109.} Id. § 1532(19).

^{110. 50} C.F.R. § 17.3 (2012).

^{111.} The Supreme Court upheld this rule in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995). Under ESA section 10, the Services may issue an Incidental Take Permit to a non-federal entity, allowing legalized "take" of protected species where the take would be "incidental to, and not the purpose of, the carrying out of an

A federal agency action may incidentally result in a taking of a member of a listed species, but if the agency has followed the requirements of section 7 with respect to that action, it receives an "incidental take statement" from the relevant Service authorizing a certain level of take in connection with that action. The incidental take statement must specify the impact of the anticipated take on the species, along with "those reasonable and prudent measures that the Secretary considers necessary or appropriate to address such impact." It also prescribes binding terms and conditions for implementing these reasonable and prudent measures. 114

For non-federal actions, the ESA provides a different means of authorizing incidental take of listed animals. Under section 10, the Secretary may issue an incidental take permit¹¹⁵ to an applicant that has submitted a conservation plan for a particular activity, specifying the measures the applicant will take to minimize harm to the species.¹¹⁶ Before issuing the permit, the Secretary essentially must find that the incidental taking will not cause jeopardy to the listed species¹¹⁷ and that the applicant will minimize and mitigate harm to the species to the greatest extent practicable.¹¹⁸

While all of these provisions are relevant to the water resources context, many of the biggest endangered species controversies have arisen from the application of section 7 to the operation of federal water projects, and the next Section discusses three river basins where ESA compliance became a major issue.

otherwise lawful activity." 16 U.S.C. § 1539(a)(1)(B) (2006). The applicant for such an incidental take permit must submit a conservation plan, better known as a habitat conservation plan (HCP), describing (among other things) the applicant's steps to mitigate or minimize take and the funding available for these efforts. *Id.* § 1539(a)(2)(A).

- 112. *Id.* § 1536(b)(4); see Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 422 F.3d 782, 790 (9th Cir. 2005).
- 113. 16 U.S.C. § 1536(b)(4)(C)(i)-(ii) (2006).
- 114. *Id.* § 1536(b)(4)(C)(iv) (incidental take statement "sets forth the terms and conditions . . . that must be complied with by the Federal agency or applicant (if any), or both, to implement the measures specified ").
- 115. Section 10 allows the Secretary to issue certain types of permits, "under such terms and conditions as he shall prescribe." *Id.* § 1539(a)(1). One such permit allows taking of listed animals that would otherwise be prohibited by section 9, "if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." *Id.* § 1539(a)(1)(B).
- 116. Such a plan must also identify funding sources available for mitigation, alternative actions considered by the applicant, and other measures as the Secretary may identify. *Id.* § 1539(a)(2)(A).
- 117. The statute does not use the term "jeopardy" here, but requires a finding that the incidental taking "will not appreciably reduce the likelihood of the survival and recovery of the species in the wild." Id. § 1539(a)(2)(B)(iv). This language matches the key portion of the jeopardy definition in the ESA implementing rules. 50 C.F.R. § 402.02 (2012).
- 118. 16 U.S.C. § 1539(a)(2)(B)(ii). Section 10 requires other findings as well, including adequate funding for the plan. *Id.* § 1539(a)(2)(B)(iii).

B. Section 7 and USBR Projects: Three Examples

One reason why the ESA has generated such heated disputes in the water context is that it operates so differently from western state water law, which recognizes property rights in water use and gives top priority to the oldest ones. 119 The ESA does not itself create or obtain water rights for the flows needed to protect species, but instead operates as a regulatory overlay on the legal system for water allocation and management. 120 The ESA does not eliminate or directly restrict water rights, but it can limit their exercise as needed to avoid a take of listed species, 121 or jeopardy caused by federal water management actions. 122 If water use is restricted for purposes of maintaining adequate flows for listed species, the ESA does not necessarily limit junior users (as state law would), but rather may trump appropriative rights to curtail the uses most directly responsible for causing harm. 123 Because section 7 imposes special duties on federal agencies, the most vulnerable water uses under the ESA are those with a federal nexus—most notably, those who receive water from a federal project. 124

In order to show how RIPs differ from the usual *modus operandi* in their approach to section 7 compliance, this Section discusses three "standard" consultations on the operation of USBR water projects. Each of the resulting BOs was challenged in court, and this Section draws from the published

^{119.} See supra notes 23-26 and accompanying text.

^{120.} See, e.g., Cnty. of Okanogan v. Nat'l Marine Fisheries Serv., 347 F.3d 1081 (9th Cir. 2003) (rejecting challenge to restrictions on irrigation diversions, imposed through consultation on permits for ditches crossing federal lands; court noted that the issue was one of federal regulatory power rather than water rights).

^{121. &}quot;The Act provides no exemption from compliance to persons possessing state water rights" United States v. Glenn-Colusa Irrigation Dist., 788 F. Supp. 1126, 1134 (E.D. Cal. 1992) (enjoining irrigation diversions by district, which had improperly screened pumps that were killing and injuring listed salmon in violation of the section 9 take prohibition).

^{122.} See, e.g., Kandra v. United States, 145 F. Supp. 2d 1192, 1201 (D. Or. 2001) (rejecting claims by irrigators that they had legal rights to the water from the Klamath Project despite the USBR's need to avoid jeopardy in operating the project; the court stated that "as recognized by this court and the Ninth Circuit, plaintiffs' contract rights to irrigation water are subservient to ESA and tribal trust requirements").

^{123.} See David E. Filippi, The Impact of the Endangered Species Act on Water Rights and Water Use, 48 PROC. ROCKY MTN. MIN. L. INST. 22–1, 22–11, 22–25 (2002) (describing how ESA restrictions on water use to protect listed species in the Walla Walla River conflicted with water right priorities under state law).

^{124.} Some federal project water users have sued for compensation, arguing that they have lost water due to ESA restrictions and claiming a breach of contract and/or a taking of property rights. The results have been mixed, and several of the leading cases are still being litigated. See, e.g., Klamath Irrigation Dist. v. United States, 635 F.3d 505 (Fed. Cir. 2011); Casitas Mun. Water Dist. v. United States, 102 Fed. Cl. 443 (2011). See generally Douglas L. Grant, ESA Reductions in Reclamation of Water Contract Deliveries: A Fifth Amendment Taking of Property?, 36 ENVIL. L. 1331 (2006).

opinions in these cases to explain both the consultation and the resulting litigation. It concludes with a brief discussion of subsequent developments, as negotiations followed litigation in all three river basins.

1. Lower Colorado

Lake Mead, at the end of the Grand Canyon, is one of the most important federal reservoirs, providing major water supply and hydropower benefits for the Lower Colorado River Basin states (the "Lower Basin states") of Arizona, California, and Nevada. The USBR operates Lake Mead (Hoover Dam) in accordance with the "Law of the River," an extensive set of compacts, statutes, court decrees, and treaties governing the allocation of the Colorado River's limited and highly variable water supplies. The USBR's operations on the Lower Colorado may affect a number of listed species, the original ESA dispute over Lake Mead operations focused on the southwestern willow flycatcher; as its name implies, the flycatcher occupies willow habitat, and disappearance of such habitat along southwestern rivers was a major reason the species was listed in 1995.

As a result of several dry years in the Colorado River Basin, however, new flycatcher habitat appeared in a precarious place: the Lake Mead delta, at the upper end of the reservoir. Low lake levels allowed willows to grow up in the temporarily dry lakebed, and they eventually took over 1,148 acres, representing "the second largest continuous patch of native willow habitat known to exist in the Southwest." By the mid-1990s, however, wetter weather allowed the USBR to refill the reservoir, causing destruction of the willow habitat and "take" of flycatchers occupying these trees. ¹³⁰

After the USBR submitted its biological assessment in 1996, FWS delivered a draft BO concluding that project operations on the Lower

^{125.} These benefits include providing irrigation water for 2.4 million acres in California, Arizona, and Mexico, and municipal water supply for a population of over 20 million in the Lower Basin states (Arizona, California, Nevada). Hoover Dam is also one of the world's largest producers of hydropower. *Boulder Canyon Project—Hoover Dam*, U.S. BUREAU OF RECLAMATION, http://www.usbr.gov/projects/Project.jsp?proj_Name=Boulder%20Canyon%20Project%20-%20Hoover%20Dam (last visited Sept. 18, 2012).

^{126.} U.S. BUREAU OF RECLAMATION, THE COLORADO RIVER DOCUMENTS 2008 xxxvii-xli, 1-1 to 1-6 (2010).

^{127.} See id. at 3-11 to 3-13 (identifying species affected by Lower Colorado operations including various fish species, the Yuma clapper rail, Southwestern willow flycatcher, and flat-tailed horned lizard).

^{128.} U.S. Fish and Wildlife Service, Final Rule Determining Endangered Status for the Southwestern Willow Flycatcher, 60 Fed. Reg. 10,694, 10,707 (Feb. 27, 1995).

^{129.} Sw. Ctr. for Biological Diversity v. Bureau of Reclamation, 143 F.3d 515, 517 (9th Cir. 1998).

^{130.} *Id*.

Colorado for the next five years would cause jeopardy to the flycatcher. This draft BO found that loss of the willow habitat in the Lake Mead Delta could prove catastrophic, and emphasized the need to protect this existing habitat from inundation. The RPA that FWS issued required the USBR, among other things, "to use the full scope of its authority and discretion to immediately protect and maintain the 1148 acres of riparian habitat" in the lakebed—essentially blocking the re-filling of Lake Mead. If the USBR could not protect the Lake Mead habitat, it had to preserve habitat at a nearby reservoir, Lake Roosevelt, by temporarily filling the lake no higher than an elevation of 2,136 feet. ¹³¹ As of January 1997, FWS believed that jeopardy to the flycatcher could not be avoided without these measures. ¹³²

After receiving the draft BO for comment, the USBR pushed back, insisting it had limited discretion in operating Lake Mead and could not avoid refilling the reservoir to protect flycatchers. ¹³³ FWS deferred to the USBR on this point, and in the final BO it no longer required protection of the existing habitat at Lake Mead, or the fallback habitat at Lake Roosevelt. Instead, the FWS produced a new RPA relying on a short-term program of acquiring and protecting about 1,400 acres of currently unprotected habitat—preferably (but not necessarily) habitat already occupied by flycatchers. All of the habitat had to be protected by 2001 (with the first 500 acres by 1999), but the RPA did not specify any particular parcels of habitat, or require any of it to be established before the Lake Mead Delta habitat was wiped out. ¹³⁴ The RPA did call for additional long-term measures, however, including provision of additional habitat and continued development of a "Multi-Species Conservation Program" for the Lower Colorado River. ¹³⁵

^{131.} The USBR had to defer using the Lake Roosevelt storage space above 2,136 feet "until suitable flycatcher habitat could be developed elsewhere." *Id.* at 518. Lake Roosevelt, northeast of Phoenix, is part of the USBR's Salt River Project. *Salt River Project*, U.S. BUREAU OF RECLAMATION, http://www.usbr.gov/projects/Project.jsp?proj_Name=Salt%20 River%20Project&pageType=ProjectPage (last updated Aug. 19, 2011).

^{132.} Sw. Center for Biological Diversity, 143 F.3d at 518.

^{133.} The USBR took the position that it could lower Lake Mead only for purposes of river regulation, improvement of navigation, flood control, irrigation, domestic uses, and power production. *Id.* This position prevailed in a later case involving the Lower Colorado River, as the court held that the "Law of the River" left the USBR with no discretion to operate its projects for the benefit of ESA-listed species located in Mexico. *See* Defenders of Wildlife v. Norton, 257 F. Supp. 2d 53, 69 (D.D.C. 2003). Because section 7 applies only to discretionary federal actions, the scope of the USBR's discretion in project operations is crucial for purposes of determining the nature and extent of the agency's ESA duties. *See* Benson, *supra* note 96, at 32–55.

^{134.} Sw. Ctr. for Biological Diversity, 143 F.3d at 518.

^{135.} *Id.* at 518–19. The Multi-Species Conservation Program is discussed *infra* at notes 197–207 and accompanying text.

The Southwest Center for Biological Diversity filed suit to protect the Lake Mead Delta habitat, arguing that the USBR's operations were violating the ESA and that the RPA was arbitrary and capricious. The district court granted summary judgment to the government on the RPA claim, rejecting arguments that the RPA failed to avoid jeopardy; ¹³⁶ the court upheld the RPA despite the flycatcher's "precarious status" even though the final RPA was far weaker than the draft in requiring protection of existing flycatcher habitat. ¹³⁸ On appeal, the Ninth Circuit had little trouble upholding the district court, and explained that the ESA imposes few requirements on RPA selection:

[T]he Secretary was not required to pick the first reasonable alternative the FWS came up with in formulating the RPA. The Secretary was not even required to pick the best alternative or the one that would most effectively protect the Flycatcher from jeopardy. The Secretary need only have adopted a final RPA which complied with the jeopardy standard and which could be implemented by the agency.

Secondly, under the ESA, the Secretary was not required to explain why he chose one RPA over another, or to justify his decision based solely on apolitical factors. Accordingly, the district court had no reason to address the possible factors that might have motivated the Secretary in rejecting the draft RPA or to address the merits of Southwest's argument that the Secretary improperly rejected the draft RPA based on Reclamation's bare assertion that it lacked the discretion to lower the water level at Lake Mead. 139

The court went on to uphold the district court's determination, based on the record, that the final RPA satisfied these requirements. ¹⁴⁰ Thus, *Southwest Center* shows that the government has vast discretion in choosing an RPA, so long as it can make and support a finding of no jeopardy.

2. Klamath

The Klamath River Basin straddles the Oregon-California line, and the USBR's Klamath Project delivers water for irrigation in both states.

^{136.} Sw. Ctr. for Biological Diversity v. Bureau of Reclamation, 6 F. Supp. 2d 1119, 1129, 1134 (D. Ariz. 1997).

^{137.} Id. at 1131.

^{138.} *Id.* at 1128–31, 1133.

^{139.} Sw. Ctr. for Biological Diversity, 143 F.3d at 523 (citations and footnotes omitted).

^{140.} *Id.* (explaining the rationale in support of the FWS finding of no jeopardy, and stating that the plaintiff had provided no convincing evidence to the contrary).

Operation of this project, along with hydropower dams and non-project irrigation, ¹⁴¹ has dramatically altered the Klamath Basin ecosystem to the detriment of several types of fish. Two species of suckers were listed under the ESA in 1988, followed by coho salmon in the Klamath River in 1997. ¹⁴² These listings effectively put the squeeze on Klamath Project operations, because the suckers need certain water levels for their habitat in Upper Klamath Lake—the main source of irrigation water storage for the project—while the salmon require releases from the lake to provide adequate flows to maintain habitat and water temperatures in the Klamath River.

The USBR began consulting in the early 1990s on annual operating plans for the Klamath Project, but because the latter part of that decade was relatively wet, the project was able to meet fish habitat requirements without reducing irrigation deliveries. The good times ended in 2000, however, as the weather turned abruptly dry that summer and remained so through the winter. By early 2001, the USBR was facing both a historic drought in the Klamath Basin, and a court order to complete consultation before delivering irrigation water from the project. The resulting BOs divided nearly all of the year's limited water supplies between the lake (for suckers) and the river (for salmon), leaving none for most Project irrigators. The decision brought loud protests, both from the farming communities of the Klamath Basin (where some people engaged in civil disobedience) and from politicians sympathetic to their plight.

The following year, the USBR produced a new ten-year operating plan for the Klamath Project, and consultation on this plan with the NMFS resulted in a ten-year BO regarding impacts on coho salmon. The USBR had essentially proposed to release enough water to replicate recent average flows in the Klamath River, and also develop a "water bank" to provide up to an additional 100,000 acre-feet of water to be dedicated to salmon. The BO found that project operations would cause jeopardy to the coho, and provided an RPA to avoid that result. The RPA specified the Klamath

^{141.} See Reed D. Benson, Giving Suckers (and Salmon) an Even Break: Klamath Basin Water and the Endangered Species Act, 15 TULANE ENVIL. L.J. 197, 201–09 (2002).

^{142.} *Id.* at 216–18.

^{143.} *Id.* at 218–20.

^{144.} Id. at 221–22.

^{145.} Id. at 223-27.

^{146.} *Id.* at 198–99, 228.

^{147.} The new operating plan was based partly on a 2002 report by the National Research Council, finding a lack of scientific support for the flow recommendations of the 2001 BO on the effect of Klamath Project operations on salmon. *See* Pac. Coast Fed'n of Fishermen's Ass'ns v. Bureau of Reclamation, 426 F.3d 1082, 1087–88 (9th Cir. 2005).

^{148.} The average flow varied by water year type, so the average flow for a dry water year would be lower than for a wet year, and the USBR's biological assessment proposed to provide similar flows based on the year type. *Id.* at 1088.

River flows needed to avoid jeopardy, based on coho habitat requirements and the need to maintain suitable summer water temperatures. ¹⁴⁹ For the first eight of the ten years, however, the RPA allowed flows in the river to be significantly lower; for the period from 2006–2010, flows could be as low as 57% of the long-term requirements. ¹⁵⁰ The gap between the flows salmon need, and the flows the project would provide, reflected the RPA's "organizing principle" that the USBR should be responsible for no more than its share of overall water use in the Klamath Basin. "Because the project irrigates 57 percent of the land in the basin, the RPA provided that the BOR would provide 57 percent of the water needed for the coho, and establish an intergovernmental workgroup to 'develop the other 43 [percent] of the flows.' "151"

Fishing and conservation groups challenged the Klamath Project BO, and the courts rejected two of its key features. First, the RPA provision allowing the USBR to provide only 57% of the necessary Klamath River flows was held to be arbitrary and capricious. The district court found that the NMFS had improperly relied on "actions that were 'not reasonably certain to occur' when it determined that the coho would receive 100 percent of the flows through a collaborative process." But the district court upheld the RPA's phased approach, even though it effectively ensured that flows would fall well below the specified long-term levels for the first eight years of the ten-year period. 154

The Ninth Circuit reversed on this latter point, finding that the BO had not adequately explained its conclusion that the coho would not be jeopardized as a result of eight years of flows lower than those deemed necessary for the species' long-term survival. Seeing no analysis to support this conclusion, the court rejected the NMFS's argument that the BO reflected the agency's expert judgment in an area where the science was uncertain. The court found that the RPA laid out a clear rationale for the long-term flow requirements, but no rationale for why salmon would not be

^{149.} Id. at 1089.

^{150.} Id. at 1088-89.

^{151.} Id. at 1088.

^{152.} The district court upheld the determination of long-term flow needs for coho, however, and the plaintiffs did not appeal on this point. *See id.* at 1089.

^{153.} See id. There was no appeal on this point, but the Ninth Circuit stated, "The proper baseline analysis is not the proportional share of responsibility the federal agency bears for the decline in the species, but what jeopardy might result from the agency's proposed actions in the present and future human and natural contexts." See id. at 1093.

^{154.} See id. at 1089-90.

^{155.} *Id.* at 1094. "The agency essentially asks that we take its word that the species will be protected if its plans are followed. If this were sufficient, the NMFS could simply assert that its decisions were protective and so withstand all scrutiny." *Id.* at 1092.

jeopardized by eight years of much lower flows. ¹⁵⁶ Noting that five generations of coho in the Klamath River would be affected by these low flows, the court faulted the BO's failure to explain how the RPA nonetheless avoided jeopardy, declaring that an agency may not "provide only partial protection for a species for several generations without any analysis of how doing so will affect the species." ¹⁵⁷ The Ninth Circuit remanded the case to the district court for "appropriate injunctive relief," stressing that "[i]t is not enough to provide water for the coho to survive in five years, if in the meantime, the population has been weakened or destroyed by inadequate water flows." ¹⁵⁸ The litigation over the 2002 Klamath Project BO illustrates that an RPA may be vulnerable to challenge, despite the Service's expertise, if the "no jeopardy" conclusion relies on a faulty view of the law or a weak explanation of effects on the species.

3. Middle Rio Grande

The "Middle" Rio Grande is a 170-mile stretch of river in New Mexico between Cochiti Dam and the headwaters of Elephant Butte Reservoir. Flows in this reach are heavily influenced by the Middle Rio Grande Conservancy District (MRGCD), which diverts water for irrigation of more than 60,000 acres of the Rio Grande Valley. The MRGCD has contracts to receive water from two USBR projects, the Middle Rio Grande Project and the San Juan–Chama Project; several other New Mexico water users, notably the City of Albuquerque, also have San Juan–Chama contracts. Operation of these projects became subject to the ESA when the Rio Grande silvery minnow was listed as an endangered species in 1994. Once abundant throughout much of the Rio Grande watershed, the

^{156.} *Id.* at 1093–94. The court noted, for example, that the RPA set long-term July flows at 1,000 cfs, but the RPA would allow flows as low as 570 cfs from 2006–2010. *Id.*

^{157.} Id

^{158.} *Id.* at 1095.

^{159.} See Rio Grande Silvery Minnow v. Keys, 469 F. Supp. 2d 973, 978–79 (D.N.M. 2002) (describing the various reaches of the 170-mile Middle Rio Grande, which is segmented by several major diversion dams).

^{160.} See Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109, 1134 (10th Cir. 2003), vacated as moot, 355 F.3d 1215 (10th Cir. 2004).

^{161.} See 333 F.3d at 1122-27 (discussing these two projects and their associated contracts).

^{162.} See, e.g., Sean O'Connor, The Rio Grande Silvery Minnow and the Endangered Species Act, 73 U. COLO. L. REV. 673 (2002); Beth Richards, The Pump Don't Work Because the Bureau Took the Handle: The United States Bureau of Reclamation's Discretion to Reduce Water Deliveries to Comply with the Endangered Species Act, 4 WYO. L. REV. 113 (2004); Ethan R. Hasenstein, Frankenstein and Pitbull? Transmogrifying the Endangered Species Act and "Fixing" the San Juan-Chama Project after Rio Grande Silvery Minnow v. Keys, 34 ENVTL. L. 1247 (2004).

minnow had been extirpated from all but the "middle" reach and faced extinction because its river habitat had been dramatically altered by dams, diversion structures, and low flows. 163

In the late 1990s, with the silvery minnow populations continuing to decline despite the ESA listing,¹⁶⁴ the USBR initiated section 7 consultation on its project operations.¹⁶⁵ In its 1999 biological assessment, however, the USBR argued that its operating discretion was limited by its water delivery obligations. The USBR contended, and the FWS agreed,¹⁶⁶ that the USBR could not reduce deliveries to users holding contracts for San Juan–Chama Project or Middle Rio Grande Project water, regardless of the ESA. Environmental groups challenged the resulting BO on operation of these projects, and although the district court found that the government did indeed have discretion to reduce water deliveries for the minnow's benefit,¹⁶⁷ Federal District Judge James A. Parker nonetheless upheld the BO because the FWS had "come up with an interim solution to avoid jeopardy" that "may be workable."¹⁶⁸

In September 2002, however, the FWS—in the midst of extreme drought conditions¹⁶⁹—issued a new BO that allowed the key reach of the Rio Grande to go dry, potentially wiping out the last wild population of silvery minnows.¹⁷⁰ Judge Parker refused to approve the new BO, which found the minnow would be jeopardized by the USBR's operations but contained no RPA.¹⁷¹ His opinion pointedly criticized the USBR for allow-

^{163.} Final Rule to List the Rio Grande Silvery Minnow As an Endangered Species, 59 Fed. Reg. 36988 (July 20, 1994) (to be codified at 50 C.F.R. pt. 17). In listing the species as endangered, FWS also identified other factors for the silvery minnow's decline, including competition from non-native species. *Id.* at 36989.

^{164.} See Rio Grande Silvery Minnow v. Keys, 356 F. Supp. 2d 1222, 1229 (D.N.M. 2002) (noting evidence of decline of silvery minnow populations since 1994).

^{165.} Joan E. Drake, Contractual Discretion and the Endangered Species Act: Can the Bureau of Reclamation Reallocate Federal Project Water for Endangered Species in the Middle Rio Grande?, 41 NAT. RESOURCES J. 487, 496–97 (2001).

^{166.} Rio Grande Silvery Minnow v. Keys, 469 F. Supp. 2d 973, 998–99 (D.N.M. 2002) (noting that FWS adopted the USBR's legal position regarding the USBR's limited discretion in operating the projects).

^{167.} *Id*

^{168.} *Id.* at 999–1000. The court noted that FWS had reached this solution "in coordination with all the major players in the middle Rio Grande basin." *Id.* at 999.

^{169.} See Rio Grande Silvery Minnow, 356 F. Supp. 2d at 1225-28.

^{170.} *Id.* at 1231–32 (noting that the USBR had proposed to allow the "all-important" San Acacia reach—home to nearly all of the remaining wild minnows—to dry up, and that "extensive river drying in the San Acacia Reach could result in the extinction of the silvery minnow in the wild").

^{171. &}quot;There appears to be no precedent, and the parties have presented none, for a Court to affirm a BO that has a finding of jeopardy with no RPA...." *Id.* at 1226. The court stressed that only the Endangered Species Committee, often called the "God Squad,"

ing a crisis to develop by delivering full water supplies in 2002 despite the obvious drought conditions, by waiting to reinitiate consultation until nearly all the available water was gone, ¹⁷² and finally by refusing to release stored water for minnow survival in order to protect water users from future shortages. ¹⁷³ Although the ESA allows agencies "to consider the interests of others besides an endangered species if they can at the same time avoid jeopardy to the endangered species, it is not allowable for agencies to give paramount weight to the interests of others when by doing so they have no proposal to avoid jeopardy." The court ordered the USBR to provide certain minimum flows through 2003. ¹⁷⁵

A divided Tenth Circuit panel affirmed Judge Parker's decision on the scope of the USBR's discretion regarding project operations. Within months, the panel's decision was vacated as moot, the by then the FWS had already issued a new BO for project operations. In addition, Congress partially undid the Court of Appeals decision through an appropriations rider prohibiting use of water from the San Juan–Chama Project (except for water leased or purchased from willing sellers) to meet the requirements of the ESA, and declaring that compliance with restrictions in a March 2003 BO would fully satisfy ESA section 7. The original "minnow

had the power to allow a federal agency action that would jeopardize a listed species. *Id.* at 1224–25.

- 172. Id. at 1225–26.
- 173. *Id.* at 1233–34.
- 174. Id. at 1227.
- 175. The court allowed lower flows for the remainder of 2002 than would have been allowed under the 2001 BO. For 2003, the court required the USBR to maintain the flows provided in 2001 BO unless and until a new one was issued. *Id.* at 1237–38.
- 176. Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109 (10th Cir. 2003), vacated as moot, 355 F.3d 1215 (10th Cir. 2004).
- 177. *Id.* at 1222. The court found the appeal moot for various reasons, including a subsequent Congressional enactment relating to the San Juan–Chama Project, the effective expiration of Judge Parker's injunction, and favorable climatic conditions that had resulted in better habitat for the minnow. *Id.* at 1219–21.
- 178. See Rio Grande Silvery Minnow v. Keys, 469 F. Supp. 2d 1003, 1007 (D.N.M. 2005) (new BO issued in March 2003).
- 179. The statute stated in part:
 - (a) Notwithstanding any other provision of law, the Secretary of the Interior, acting through the Commissioner of the Bureau of Reclamation . . . may not use discretion, if any, to restrict, reduce or reallocate any water stored in Heron Reservoir or delivered pursuant to San Juan-Chama Project contracts, including execution of said contracts facilitated by the Middle Rio Grande Project, to meet the requirements of the Endangered Species Act, unless such water is acquired or otherwise made available from a willing seller or lessor and the use is in compliance with the laws of the State of New Mexico, including but not limited to, permitting requirements.

rider" locked in the 2003 BO for two years, ¹⁸⁰ but Congress soon extended that period to ten years. ¹⁸¹ Responding to the outcry in New Mexico against the Tenth Circuit decision, ¹⁸² Congress sought to give a measure of certainty to the City of Albuquerque and other water users on the Middle Rio Grande. ¹⁸³ The silvery minnow story demonstrates that ESA restrictions on traditional water deliveries can provoke a strong political backlash, and Congress always has the last word in deciding whether species will be protected. ¹⁸⁴

While the Lower Colorado, Klamath, and Middle Rio Grande consultation stories produced three different morals, they also have some notable similarities. Each consultation resulted in a BO that found jeopardy to a listed species based on the USBR's project operations. Each BO was challenged in federal court and litigated up through a court of appeals. And as explained in the next Part, each of these disputes—perhaps surprisingly—was followed by some type of negotiation or collaborative process focused on the needs of the listed species.

(b) Complying with the reasonable and prudent alternatives and the incidental take limits defined in the Biological Opinion released by the United States Fish and Wildlife Service dated March 17, 2003 combined with efforts carried out pursuant to Public Law 106-377, Public Law 107-66, and Public Law 108-7 fully meet all requirements of the Endangered Species Act (16 U.S.C. 1531 et seq.) for the conservation of the Rio Grande Silvery Minnow (Hybognathus amarus) and the Southwestern Willow Flycatcher (Empidonax trailii extimus) on the Middle Rio Grande in New Mexico.

Energy and Water Development Appropriations Act, Pub. L. No. 108-137, § 208, 117 Stat. 1827, 1849-50 (2003).

- 180. Id. § 208(d), 117 Stat. 1850.
- 181. Consolidated Appropriations Act, Pub. L. No. 108-447, § 205(d), 118 Stat. 2935, 2949 (2004).
- 182. See Lara Katz, History of the Minnow Litigation and its Implications for the Future of Reservoir Operations on the Rio Grande, 47 NAT. RESOURCES J. 675, 683–85 (2007) (describing a Congressional field hearing in Belen, New Mexico, where the 10th Circuit decision was criticized by all witnesses except a representative of the environmental plaintiffs).
- 183. Id. at 685–87 (quoting New Mexico Senator Jeff Bingaman as saying, among other things, that the rider was needed to provide "some level of certainty for water users"); Michael Connor, Commentary on "History of the Minnow Litigation and Its Implications for the Future of the Reservoir Operations on the Rio Grande," 47 NAT. RESOURCES J. 693, 694 (2007) (describing the rider as "providing some level of certainty for water users but still necessitating changes in the way water is used in the Middle Rio Grande"). Connor, now Commissioner of the USBR, was Senator Bingaman's primary water staff person at the time of the rider. Id. at 693.
- 184. Congress has acted to override the ESA before. One of the earliest major ESA controversies involved the endangered snail darter and the nearly completed Tellico Dam. After the U.S. Supreme Court famously held in *T.V.A. v. Hill*, 437 U.S. 153 (1978), that finishing the dam would jeopardize the species in violation of the ESA, Congress ordered the dam completed nonetheless. 125 CONG. REC. S23,872 (Sept. 10, 1979).

4. Further Developments: Negotiation Follows Consultation and Litigation

On the Middle Rio Grande, the "minnow rider"—while protecting water users and preventing legal challenges to the 2003 BO—also provided for an Endangered Species Collaborative Program. Specifically, Congress directed the Interior to establish an executive committee "for purposes of improving the efficiency and expediting the efforts of the Endangered Species Collaborative Program Workgroup," with members from the USBR, the FWS, a New Mexico state agency, MRGCD, and other identified stakeholders. The Middle Rio Grande Endangered Species Collaborative Program continues to this day; its home page describes it as "a partnership involving 16 current signatories organized to protect and improve the status of endangered species along the Middle Rio Grande (MRG) of New Mexico, while simultaneously protecting existing and future regional water uses Program activities include water acquisition and management, habitat restoration, endangered species monitoring, and silvery minnow propagation." 187

In the Klamath Basin, continuing declines in salmon and other fisheries—and related conflicts over water management and other issues—led to major negotiated agreements¹⁸⁸ in the latter half of the last decade.¹⁸⁹ The Klamath Basin Restoration Agreement (KBRA) was the product of

^{185.} Energy and Water Development Appropriations Act, Pub. L. No. 108-137, § 209, 117 Stat. 1827, 1850 (2003).

^{186.} The other designated seats on the executive committee are assigned to "other federal agencies" (besides the USBR and the FWS), municipalities, agricultural communities, and Middle Rio Grande Pueblos (six Indian communities located along this reach of the river); one seat was also reserved for "universities and environmental groups." *Id.*

^{187.} MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM, http://www.mrgesa.com (last visited July 12, 2012). The USBR is the lead agency for the Collaborative Program. *Id.* Current signatories include the USBR, the FWS, the Bureau of Indian Affairs, and the Army Corps of Engineers; the City of Albuquerque and its water utility; MRGCD and an association of its patrons; four New Mexico state agencies; four Indian Pueblos; and the University of New Mexico. *History*, MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM, http://www.mrgesa.com/Default.aspx?tabid=175 (last visited July 12, 2012). Environmental groups, however, are conspicuously absent. The website also explains how the program was prompted by efforts to resolve the silvery minnow litigation, and grew out of an ESA Workgroup organized by the USBR and the New Mexico Interstate Stream Commission. *Id.*

^{188.} This article focuses on the Klamath Basin Restoration Agreement, but there is also a related Klamath Hydropower Settlement Agreement. *See Klamath Restoration: Background*, KLAMATHRESTORATION.GOV, http://www.klamathrestoration.gov/about-us/background (last visited Sept. 18, 2012).

^{189.} For an excellent summary of the factors contributing to the formation of these agreements, see Hannah Gosnell & Erin Clover Kelly, *Peace on the River? Social-Ecological Restoration and Large Dam Removal in the Klamath Basin, USA*, 3 WATER ALTERNATIVES, no. 2, 2010 at 361.

three years of negotiations involving federal and state agencies (both Oregon and California), tribes, local governments, water users, and conservation groups. The KBRA was designed to produce "effective and durable solutions" to restore and sustain natural fish populations throughout the basin and ensure reliable water and power supplies for agriculture and other uses. Existing irrigation was not fully protected, however, as the KBRA set limits on water diversions for the USBR's Klamath Project that would result in deliveries of about 100,000 acre-feet less than demand in very dry years. This wide-ranging and detailed agreement also addresses "regulatory assurances," including ESA compliance, and suggests that the Services should avoid further restrictions on irrigation deliveries in any future consultation on Klamath Project operations. The KBRA requires congressional approval, however, and is currently stalled due to Tea Party opposition.

For purposes of this article, however, the Lower Colorado River Multi-Species Conservation Program (MSCP) is most significant because it figures prominently in section 7 compliance for the USBR's Lower Colorado River operations. The MSCP has been described as "a cooperative effort between Federal and non-federal entities" that serves three purposes: "conserving habitat and working toward the recovery of threatened and endangered species, as well as reducing the likelihood of additional species being listed; accommodating present water diversions and power production and optimizing opportunities for future water and power development . . . and

^{190.} SUMMARY: KLAMATH BASIN RESTORATION AGREEMENT 1, 10-11 (2010), available at http://www.usbr.gov/mp/kbao/kbra/docs/Web%20KBRA%20updates/Summary_of_Klamath_Basin_Restoration_Agreement.pdf (this summary gives no indication of who wrote it, but it can be found on the website for the USBR's Klamath Basin Area Office).

^{191.} *Id.* at 1.

^{192.} Id. at 4.

^{193.} The KBRA has nearly 40 sections covering over 170 pages, plus nearly 200 pages of appendices. KLAMATH BASIN RESTORATION AGREEMENT FOR THE SUSTAINABILITY OF PUBLIC AND TRUST RESOURCES AND AFFECTED COMMUNITIES (2010), available at http://www.klamathrestoration.gov/sites/klamathrestoration.gov/files/Klamath-Agreements/Klamath-Basin-Restoration-Agreement-2-18-10signed.pdf.

^{194.} *Id.* at 143-62. The ESA material, *id.* at 153-59, addresses both section 7 and section 10 compliance.

^{195.} *Id.* at 158–59 (stating that if Services find jeopardy in a future BO on Klamath Project operations, "before seeking any further limitations on diversion, use, and reuse of water related to the Klamath Reclamation Project beyond the limitations provided in . . . this Agreement, NMFS and FWS will consider, to the maximum extent consistent with the ESA," certain specified alternative approaches).

^{196.} William Yardley, *Tea Party Blocks Pact to Restore a West Coast River*, N.Y. TIMES, July 18, 2012, at A16. The deal's opponents see the federal government as being more concerned with fish than farmers, and suggest that the KBRA is related to an environmentalist campaign to remove larger dams in the Columbia River system. *Id.*

providing the basis for incidental take authorizations."¹⁹⁷ Thus, the MSCP is designed not only to benefit species and their habitat while allowing for ongoing and future water uses, but also to provide coverage against potential "take" liability for both federal and non-federal actors.

Efforts to launch the MSCP date to 1995, when Interior and state agency representatives from Arizona, California, and Nevada signed an initial agreement to develop the program. Although still far from complete, the MSCP appeared in the 1997 BO for USBR operations on the Lower Colorado, as continued development of the MSCP was a long-term element of the RPA. By 2005, the process produced a conservation plan with several types of elements, including maintaining and creating habitat for covered species, avoiding and minimizing impacts from water use and development activities, implementing "population enhancement measures" for covered species, and conducting monitoring and research activities.

Along with federal and state agencies, the MSCP also covers dozens of water and power providers (primarily cities and special districts) in the three Lower Basin states.²⁰¹ In order to provide a basis for take coverage for state and local entities, the conservation plan developed through the MSCP serves as a habitat conservation plan under ESA section 10.²⁰² In 2005, the Interior Secretary determined that the plan was legally sufficient to serve as the basis for an Incidental Take Permit for the non-federal participants.²⁰³ The MSCP also covers a range of federal agency actions, including the USBR's Lower Colorado River operations relating to water management, flood control, and hydropower production.²⁰⁴ For these federal activities, the MSCP's conservation plan is geared toward avoiding jeopardy to listed species or adverse modification of their critical habitat, as required by section 7. In 2005, the FWS issued a BO for the federal actions addressed in

^{197.} U.S. DEP'T OF THE INTERIOR, RECORD OF DECISION, LOWER COLORADO MULTI-SPECIES CONSERVATION PLAN 2 (2005), *available at* www.lcrmscp.gov/publications/rec_of_dec_apr05.pdf.

^{198.} *Id.* at 8.

^{199.} *Id.* at 5-6; see supra notes 134-135 and accompanying text.

^{200.} U.S. DEP'T OF THE INTERIOR, RECORD OF DECISION, LOWER COLORADO MULTI-SPECIES CONSERVATION PLAN, *supra* note 197, at 10–11. "Covered species," only some of which are listed under the ESA, are identified on pages 17–18, and conservation measures for these species are more specifically described on pages 18–20.

^{201.} *Id.* at 16 (listing participating entities from each of the three states).

^{202.} *Id.* at 8–9 (explaining that MSCP participants requested that the plan provide coverage under both section 7 and section 10 of the ESA because of some uncertainty regarding which section might be relevant for particular entities).

^{203.} Id. at 12–15 (summarizing section 10 criteria and explaining how the plan met them).

^{204.} *Id.* at 16–17 (also explaining covered activities of the FWS, the National Park Service, the Western Area Power Administration, the Bureau of Indian Affairs, and the Bureau of Land Management).

the MSCP, including the USBR's non-discretionary operations on the Lower Colorado. This BO reached a "no jeopardy" conclusion, and provided an incidental take statement that incorporated the conservation measures from the MSCP, requiring the USBR and other federal agencies to undertake these measures in order to gain take coverage under section 7.

Thus, on the Lower Colorado, Klamath, and Middle Rio Grande, consultation produced litigation, which was followed by negotiations on addressing the needs of water users and listed species. Conflicts over the application of the ESA to water management and use have also given rise to several established collaborative efforts, including the Edwards Aquifer RIP²⁰⁸ and the Missouri River Recovery Implementation Committee²⁰⁹ as well as the four RIPs discussed below. The next Section examines these four programs, with a particular emphasis on their relationship to section 7 compliance.

^{205.} U.S. DEP'T OF THE INTERIOR, FISH & WILDLIFE SERV., BIOLOGICAL AND CONFERENCE OPINION ON THE LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM 18–22 (2005) (listing USBR activities on the Lower Colorado, but stating that some activities are non-discretionary and therefore not subject to consultation requirements).

^{206.} Id. at 130.

^{207.} Id. at 135-38.

^{208.} For an excellent review of the early years of the Edwards Aquifer ESA controversy, see Todd Votteler, *The Little Fish that Roared: The Endangered Species Act, State Groundwater Law, and Private Property Rights Collide over the Texas Edwards Aquifer,* 28 ENVTL. L. 845 (1998). ESA litigation in the 1990s initially drove the need to protect the habitat of several listed species that depend on spring flows fed by the aquifer. *See, e.g.,* Sierra Club v. Lujan, 1993 WL 151353 (W.D. Tex. 1993). After years of local and state-level efforts to control groundwater use for the protection of endangered species, the FWS initiated development of a RIP for the Edwards Aquifer in 2006. ROBERT GULLEY, EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM (EARIP) SUMMARY 2 (Mar. 25, 2010), *available at* http://www.edwardsrip.org/pdfs/eariphistoryMarch2010.pdf.

^{209.} The Corps of Engineers' operation of Missouri River reservoirs generated a flurry of litigation in the dry years of the early 2000s, including separate cases brought by several states. See South Dakota v. Ubbelohde, 330 F.3d 1014 (8th Cir. 2003). Environmental groups also challenged the Corps' ESA compliance. Am. Rivers v. Army Corps of Eng'rs, 271 F. Supp. 2d 230 (D.D.C. 2003). All of this litigation prompted new Missouri River biological opinions and operating plans, which were eventually upheld by the courts. In re Operation of the Mo. River Sys. Litig., 421 F.3d 618 (8th Cir. 2005). The Missouri River Recovery Implementation Committee (MRRIC) initially grew out of a 2003 consultation on the Corps' Missouri River operations; the Corps agreed to "form an advisory group . . . made up of a broad group of stakeholders from all states along the River, [to] make recommendations on potential actions that could be undertaken to improve the functioning of the River while minimizing impacts to human uses." U.S. FISH & WILDLIFE SERV., 2003 Amendment to the 2000 Biological Opinion on the Operation of the Missouri RIVER MAINSTEM RESERVOIR SYSTEM 25, 259 (Dec. 16, 2003) (on file with author). Later, Congress authorized the Secretary of the Army to establish the MRRIC in section 5018 of the 2007 Water Resources Development Act. Pub. L. 110-114, § 5018, 121 Stat. 1041, 1199 (2007).

III. RECOVERY IMPLEMENTATION PLANS FOR RIVER-DEPENDENT SPECIES

Beginning with the pioneering Upper Colorado program in the 1980s, the RIP has increasingly become the preferred means of ESA compliance in the context of western water management and use. These programs have spread to the San Juan²¹⁰ and Platte Rivers,²¹¹ and a new RIP was recently approved for the Middle Rio Grande in New Mexico.²¹² No two programs are alike, both due to the unique characteristics of each river system and the lack of statute or rule language specific to RIPs;²¹³ thus, there is no defined or standard RIP approach to ESA implementation, only a set of programs with some similar elements.

This Section briefly describes the origins and purposes of the Upper Colorado, San Juan, Platte, and Middle Rio Grande RIPs, the roles that states and stakeholders play in them, and the ways that they relate to ESA section 7 compliance. It concludes by summarizing the legal success and political support these programs have attained.

A. A Big-Picture Look at RIPs

1. Origins

The earliest RIP dates to 1987, when the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was finalized. Many entities played a key role in developing the Upper Colorado RIP, including the USBR and the FWS, the States of Colorado, Utah, and Wyoming, and representatives of water users and environmental groups. Following the completion of the RIP Program Document, the Interior Secretary and the governors of the three states signed a Cooperative Agreement in which all the parties agreed to participate in and implement the recovery program set forth in that document.

This original RIP arose out of controversy regarding the application of ESA section 7 to water use and development activities in the Upper

- 210. San Juan RIP Program Document, supra note 13.
- 211. U.S. DEP'T OF THE INTERIOR, RECORD OF DECISION, PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM (2006) [hereinafter Platte River RIP ROD].
- 212. Middle Rio Grande RIP Draft Program Document, supra note 16.
- 213. See supra note 17 and accompanying text.
- 214. Upper Colorado RIP Program Document, supra note 12.
- 215. *Id.* at 1-1. The acknowledgment page of the Upper Colorado RIP Program Document credits a "task group" of eleven people, each representing a specific interest. *Id.* at i.
- 216. COOPERATIVE AGREEMENT FOR RECOVERY IMPLEMENTATION PROGRAM FOR ENDANGERED SPECIES IN THE UPPER COLORADO RIVER BASIN (1988). The Administrator of the federal Western Area Power Administration also signed the document. *Id.*
- 217. Id

Colorado River Basin. Three fish species in the basin had been listed under the ESA, and a fourth was a candidate for listing due to habitat loss and various other factors. By the mid-1980s FWS had issued numerous jeopardy opinions regarding the operations of both existing and proposed water projects, putting new water development in serious doubt. After trying and failing to obtain ESA relief in Congress and the courts, water users began seeking an administrative solution that would comply with existing law while also allowing continued water use and development in the basin. In 1984, an Upper Colorado River Coordinating Committee was formed under a Memorandum of Understanding among the FWS, the USBR, and the three states, and this committee provided the forum for the years of negotiations that would eventually produce the Upper Colorado RIP.

As the oldest RIP, the Upper Colorado program provided a sort of template for those that followed in the San Juan, Platte, and Middle Rio Grande. Moreover, the later RIPs would originate much like the first one did. Although the details obviously vary, there are two major common elements to all the RIP's creation stories.

Initially, each RIP grew out of a contentious (or potentially contentious) section 7 consultation on one or more water projects in a particular river basin. The San Juan River Basin RIP, established in the early 1990s, was prompted by jeopardy opinions on the USBR's soon-to-be-built Animas–La Plata Project in southwestern Colorado, and on completion of the partially built Navajo Indian Irrigation Project.²²³ The San Juan Basin, which was

^{218.} Upper Colorado RIP Program Document, *supra* note 12, at 1-3 (identifying species and causes for their decline).

^{219.} See Hannah Gosnell, Section 7 of the Endangered Species Act and the Art of Compromise: The Evolution of a Reasonable and Prudent Alternative for the Animas-La Plata Project, 41 NAT. RESOURCES J. 561, 571–72 (2001); Tom Pitts, The Upper Colorado River Endangered Fish Recovery Program: A Success Story, IRRIGATION LEADER, Oct. 2010, at 24.

^{220.} See Gosnell, supra note 219, at 571.

^{221.} *Id.* at 572; Pitts, *supra* note 219, at 24 (describing Colorado Water Congress endangered species initiative).

^{222.} Upper Colorado RIP Program Document, *supra* note 12, at 1-6. One of the key players in developing the RIP was Tom Pitts, representing the Colorado Water Congress. *Id.* at i. According to Pitts, it was the Colorado Water Congress that proposed a focus on recovery and delisting of the fish species (rather than simply avoidance of jeopardy), because recovery would best fulfill the ESA's goals while providing maximum regulatory certainty for water use and development. Pitts, *supra* note 219, at 24; Telephone Interview with Tom Pitts, Water Consult, Co-founder, in Loveland, Colo. (June 20, 2012).

^{223.} San Juan RIP Program Document, *supra* note 13, at 10–11. For a detailed and fascinating account of the events leading up to the formation of the San Juan RIP, see Gosnell, *supra* note 219, at 578–609. Gosnell's article focuses chiefly on the Animas–La Plata Project, but discusses the Navajo Indian Irrigation Project consultation at 602–06.

carved out in the early stages of negotiating the Upper Colorado RIP,²²⁴ developed its own fish recovery program as part of the RPA that allowed Animas–La Plata to be constructed.²²⁵ The Platte River RIP arose out of consultations regarding existing water projects in both Colorado and Nebraska,²²⁶ with jeopardy opinions issued in 1994 and 1997, respectively.²²⁷ Consultation on operation of the USBR's water projects on the North Platte was essentially put off pending development of the RIP in the 1990s and 2000s.²²⁸ The latest RIP is being launched in the midst of a new consultation on federal water project operations in the Middle Rio Grande of New Mexico.²²⁹ As noted above, earlier consultations in this basin produced years of litigation and a congressional rider that effectively blocked litigation over the existing BO, which expires in 2013.²³⁰

In addition, every RIP was preceded by years of negotiations involving representatives of the FWS, the USBR, state officials, and others. As noted above, the Upper Colorado RIP took over three years to negotiate once the Upper Colorado River Coordinating Committee was formed in 1984. The San Juan RIP was developed relatively quickly, although it still took two-plus years from the beginning of discussions on an Animas–La Plata Project RPA in the summer of 1990, 232 to the signing of the Cooperative Agreement establishing the RIP in October 1992. By contrast, the Platte RIP took more than a decade following the initial, 1994 federal–state Memorandum of Understanding that launched the process toward an ESA

^{224.} See Gosnell, supra note 219, at 572–73 (noting the absence of any jeopardy opinions in the San Juan Basin in the mid-1980s, and the expected difficulty of working with New Mexico state water officials).

^{225.} San Juan RIP Program Document, supra note 13, at 19–21; Tom Pitts, The San Juan River Basin Recovery Implementation Program: An Ongoing Success Story, IRRIGATION LEADER, June 2011, at 8–9.

^{226.} See John Echeverria, No Success Like Failure: The Platte River Collaborative Watershed Planning Process, 25 Wm. & MARY ENVTL. L. & POL'Y REV. 559, 565–70 (describing how consultations in Colorado and Nebraska, along with political factors, led to an initial Platte River agreement in 1994 and a later one in 1997).

^{227.} Platte River RIP ROD, *supra* note 211, at 25–26. Remarkably, the RPAs for these opinions relied on the work-in-progress RIP—which would not be finalized until 2006—to provide the long-term measures needed to avoid jeopardy. *Id.*

^{228.} See id. at 26-27.

^{229.} Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 6 (noting that FWS issued a ten-year BO for the Middle Rio Grande in March 2003), 19 (noting connection between the RIP and "the [contemplated] 2013 programmatic BO(s)").

^{230.} See supra notes 164-184 and accompanying text.

^{231.} See supra notes 214–222 and accompanying text.

^{232.} See Gosnell, supra note 219 at 590. Another source indicates that such discussions began in 1989. Pitts, supra note 225, at 8.

^{233.} Pitts, *supra* note 225, at 9.

program for the basin;²³⁴ a later agreement set up a Governance Committee of state, federal, and stakeholder representatives to negotiate the program.²³⁵ The new Middle Rio Grande RIP is a product of the Middle Rio Grande Endangered Species Collaborative Program,²³⁶ which began working to address ESA issues in the basin even before a 2002 agreement that formalized the program's governance.²³⁷ The Executive Committee for the Collaborative Program first decided in August 2009 to turn the Middle Rio Grande program into a RIP,²³⁸ although the draft program document would take another three years to complete.²³⁹

2. Purposes

Every RIP has seemingly coequal goals: benefiting certain listed species with an eye toward recovery, and providing ESA compliance for existing uses and future development of water resources. Some of the RIP documents are quite specific about these twin goals, others less so, and the wording varies from one program to another. Despite these differences, however, all the RIPs seek to achieve these two primary ends.

Program documents for the San Juan and Middle Rio Grande RIPs make this point very clearly at the outset. The latter document states the RIP's general purpose as:

To protect and improve the status of species listed pursuant to the ESA within the Middle Rio Grande (MRG) by implementing certain recovery activities to benefit those species and their associated habitats . . .

and, simultaneously,

^{234.} Echeverria, *supra* note 226, at 567. In fact, efforts to develop a Platte River program date to 1985, when a committee was formed to conduct a "Platte River Management Joint Study," which proceeded for roughly a decade but was ultimately rejected by the State of Wyoming. E-mail from Tom Pitts, Water Consult, to Reed D. Benson, Professor of Law, University of New Mexico School of Law (Oct. 10, 2012, 11:38 MDT) (on file with author). The Platte River RIP was finalized in 2006. Platte River RIP ROD, *supra* note 211.

^{235.} *Echeverria*, supra note 234, at 570–73.

^{236.} See supra notes 185–187 and accompanying text.

^{237.} Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 5 (noting that Congress first appropriated funds for Collaborative Program activities in 2001, and the MOU regarding program governance was signed in Apr. 2002).

^{238.} MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM, QUARTERLY PROGRAM UPDATE, JULY–SEPTEMBER 2009 at 2 (2009).

^{239.} Middle Rio Grande RIP Draft Program Document, *supra* note 16 (dated July 12, 2012). This document remains incomplete, however, both in the main text (see pp. 15, 18, and 21) and especially the appendices (see p. 26).

To protect existing and future water uses while complying with applicable state and federal laws, rules and regulations, and to serve as the ESA coverage vehicle for water uses and management in the MRG Program area.²⁴⁰

The San Juan RIP makes a similar statement on page one, stating as dual goals "to conserve populations" of listed fish species in the basin consistent with ESA recovery goals, and "to proceed with water development" in the basin consistent with federal and state law.²⁴¹

The Upper Colorado RIP program document, perhaps surprisingly, seems to state a single "ultimate goal": to recover the target species to the

as well as to avoid further species listings and to mitigate the impacts of new water-related activities. COOPERATIVE AGREEMENT FOR PLATTE RIVER RESEARCH AND OTHER EFFORTS RELATING TO ENDANGERED SPECIES HABITATS ALONG THE CENTRAL PLATTE RIVER, NEBRASKA, 2–3 (1997).

^{240.} Middle Rio Grande RIP Draft Program Document, supra note 16, at 3.

^{241.} This statement reflects the water development interests of Indian tribes in the San Juan Basin, referring "federal trust responsibilities to the Southern Ute Indian Tribe, Ute Mountain Indian Tribe, Jicarilla Apache Nation, and the Navajo Nation." San Juan RIP Program Document, *supra* note 13, at 1.

^{242.} The 1997 Cooperative Agreement among Interior and the three states stated that the intent of the program was to:

⁽¹⁾ secure defined benefits for the target species and their associated habitats to assist in their conservation and recovery through a basin-wide cooperative approach that can be agreed to by the three states and the Department of the Interior (DOI); (2) serve as the reasonable and prudent alternative to offset the effects of existing and new water related activities in the Platte River Basin that, in the absence of such a Program, would be found by FWS to be likely to jeopardize the continued existence of the target species or adversely modify designated critical habitat;

^{243.} Platte River RIP ROD, supra note 211, at 4.

^{244.} Id. at 3.

point where it would not require ESA protection. 245 But it also summarizes the interests of each of the participants in developing the program, including the interests of the states in water development, the USBR in reservoir operations, and water users in protecting existing legal regimes for allocation. 446 It then declares that each of the participants is committed to the successful implementation of a recovery program that will provide for recovery of the endangered fish species, consistent with Federal law and all applicable State laws and systems for water resource development and use. And it makes no bones about why the RIP came about: The primary impetus for developing this recovery program was to provide a mechanism to resolve the Section 7 conflict in the upper basin.

3. State and Stakeholder Roles

Another standard feature of RIPs is the importance of state officials and stakeholder representatives in both the development and implementation of the programs. As noted above, every RIP was preceded by years of discussions on water and ESA issues, ²⁴⁹ and with the possible exception of the San Juan program, ²⁵⁰ the majority of key players were representatives of state governments or stakeholder groups. The "task group" that produced the Upper Colorado RIP program document had four state officials, four stakeholder representatives, and three federal officials. ²⁵¹ The Governance Committee for development of the Platte RIP had three representatives of the basin states, five stakeholder representatives, and two Interior officials.

^{245.} Upper Colorado RIP Program Document, supra note 12, at 1-1.

^{246.} Other identified participants include the FWS, with its ESA responsibilities, and conservation groups, with their interests preserving the species and their habitat. *Id.* at 1-1, 1-3.

^{247.} *Id.* at 1-3.

^{248.} Id. at 1-9.

^{249.} See supra notes 231-239 and accompanying text.

^{250.} The San Juan RIP was not preceded by an agreement that defined the participation and ground rules of the formative negotiations, so unlike the other RIPs, there was no official team that developed the program. One source states that "in 1989, water users, tribes, federal agencies, and the states of Colorado, New Mexico, and Utah began discussing ESA compliance for water projects in the San Juan Basin, initially focusing on the Animas-La Plata Project." Pitts, *supra* note 225, at 8. Gosnell's account of the search for an Animas-La Plata RPA focuses on the roles of the USBR and the FWS, but also indicates that water users were actively involved while environmentalists chose to sit out the process. Gosnell, *supra* note 219, at 590–96.

^{251.} Two of the state officials were from Wyoming, while Colorado and Utah had one each. The stakeholder representatives included two from water user organizations and two from conservation groups. Two of the three federal officials were from the USBR, the other from the FWS. Upper Colorado RIP Program Document, *supra* note 12, at i.

^{252.} Colorado, Nebraska, and Wyoming each had one representative. The five stakeholder representatives included three from water user organizations and two from conservation

The Middle Rio Grande Endangered Species Collaborative Program Executive Committee, which began moving toward a RIP in 2009,²⁵³ currently has seats for three federal agencies, three state agencies, four Indian pueblos, and five stakeholder groups.²⁵⁴

In addition, each of the RIPs was finalized through the signing of a cooperative agreement by the Interior Secretary, governors of the participating states, and sometimes others. Federal officials and three governors signed the Upper Colorado agreement in 1988. Four years later, the San Juan RIP agreement was signed not only by the Interior Secretary and the governors of Colorado and New Mexico, but also by leaders of three Indian tribes in the Four Corners area; the State of Utah and the Navajo Nation chose not to sign, although the Navajos eventually did in 1996. The Interior Secretary and the governors of Colorado, Nebraska, and Wyoming signed the Platte RIP agreement in 2006, following the Secretary's decision to choose the plan negotiated by the Governance Committee. As of this writing, a cooperative agreement is still being developed for the new Middle Rio Grande RIP, to support to participate.

groups. The USBR and the FWS each had one seat. Cooperative Agreement for Platte River Research and Other Efforts Relating to Endangered Species Habitats Along the Central Platte River, Nebraska 9–10 (1997).

- 253. See supra note 238 and accompanying text.
- 254. Middle Rio Grande Endangered Species Collaborative Program, Bylaws 5–6, 8 (Sept. 2009), available at http://www.mrgesa.com/LinkClick.aspx?fileticket=ObkRkJtOTM M%3D&tabid=222&mid=580. The bylaws state that the Executive Committee is composed of certain entities that have signed a MOA, id. at 8; the bylaws also list fifteen entities that have been "invited to sign the MOA," including the FWS, the USBR, and the Corps of Engineers on the federal side; three state agencies; four pueblos; the City of Albuquerque; the water utility authority serving Albuquerque and Bernalillo County; the Middle Rio Grande Conservancy District, which primarily supplies irrigation water; and one seat each for agricultural and conservation groups, neither of which is specified. Id. at 5–6.
- 255. See supra notes 216–217 and accompanying text.
- 256. San Juan RIP Program Document, *supra* note 13, at 50–55 (signature pages of the 1992 Cooperative Agreement). The Jicarilla Apache, Southern Ute, and Ute Mountain Ute tribes signed the agreement in 1992.
- 257. *Id.* at 11. The State of Utah, however, has never come aboard. *Id.* at 29. Gosnell, *supra* note 219 at 602–06, explains the Navajo Nation's concerns and objections at the time the original Cooperative Agreement was signed.
- 258. PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM COOPERATIVE AGREEMENT, *supra* note 15, at 4 (2006).
- 259. Platte River RIP ROD, supra note 211211, at 8.
- 260. Middle Rio Grande RIP Draft Program Document, supra note 16, at 26.
- 261. *Id.* at 10–11. It appears, however, that this forthcoming cooperative agreement may be signed by the FWS, agency personnel, and stakeholders, rather than by the Interior Secretary and state and tribal elected officials. *Id.* (describing who is eligible to serve on the RIP executive committee, and indicating they would sign "a Cooperative Agreement with the Service," meaning the FWS).

The RIPs are somewhat less uniform regarding another state role: funding program operations. States collectively provide half the total cost of the Platte RIP (although only 16% of the cash), ²⁶² a small fraction (less than 10%) for the Upper Colorado RIP, ²⁶³ and none for the San Juan RIP. ²⁶⁴ Funding for the Middle Rio Grande RIP is not yet settled, although it seems likely that the vast majority of the money will be federal, ²⁶⁵ as is true in the other programs.

Once adopted, every RIP gives states and stakeholders a continuing role in carrying out the program by awarding them seats on a standing committee responsible for implementation. Each program gives this committee a different name: the Recovery Implementation Committee in the Upper Colorado, 266 the Coordination Committee in the San Juan, 267 the

- 262. Under the Platte RIP authorizing legislation, "States shall contribute not less than 50 percent of the total contributions necessary to carry out the Program." Platte River Recovery Implementation Program and Pathfinder Modification Project Authorization, Pub. L. No. 110-229, § 515(b)(3)(A), 122 Stat. 754, 848 (2008). Only \$30 million in cash is required from the states, however, compared to a federal spending authorization of \$157 million. *Id.* §§ 515(b)(3)(B)(i), 515(b)(6)(A). Contributions of water or land for the program are to make up the rest of the states' share of the cost, although "in-kind goods or services" may also be allowed if approved by the Governance Committee. *Id.* §§ 515(b)(3)(B)(ii), 515(b)(3)(C).
- 263. Upper Colorado RIP Program Document, *supra* note 12, at 5-3 (\$200,000 out of a \$2.3 million annual budget in the original program document). The percentage of state funding is slightly smaller today, as state contributions have roughly doubled to just under \$400, but the total annual budget has nearly tripled to around \$6.5 million. COLORADO RIVER RECOVERY PROGRAM FY 2012 DEPLETION CHARGE AND ANNUAL BUDGET ADJUSTMENTS (2011), *available at* http://www.coloradoriverrecovery.org/documents-publications/budget-documents/cpitbl/cpitbl12.pdf.
- 264. San Juan RIP Program Document, *supra* note 13, at 34 (explaining federal funding sources for program). The states of Colorado and New Mexico provide cost-share funding for certain capital projects under the program, although the federal share is much larger. *Id.* at 43.
- 265. "It is anticipated that funding to the RIP will be provided by entities to address ESA covered actions. Funding can be provided in the form of cash or in-kind contributions. Reclamation's authorizing language requires non-federal entities to provide a 25 percent cost share" Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 23. Federal agencies contributed around 90% of the cost of ESA activities on the Middle Rio Grande from 2001–2011. *Id*.
- 266. Upper Colorado RIP Program Document, *supra* note 12, at 3-1 to 3-3 (one seat each for the FWS, the USBR, and an official from the Western Area Power Administration; one seat for each of the three states; one seat each for water development interests and conservation groups).
- 267. San Juan RIP Program Document, *supra* note 13, at 34. One seat each is for participants in the program; participants as of 2010 were four federal agencies, two states, four Indian tribes, "water development interests," and "conservation interests." *Id.* at 29.

Governance Committee in the Platte,²⁶⁸ and the Executive Committee in the Middle Rio Grande.²⁶⁹ Similarly, the RIPs vary regarding whether and how new entities may be added to these committees.²⁷⁰

The ground rules of these RIP committees ensure that the participating states and stakeholders have great influence in program decision-making. The Upper Colorado RIP Implementation Committee operates by consensus. The other committees can act only through supermajority vote, including two-thirds for the San Juan RIP Coordination Committee and three-quarters for the Middle Rio Grande RIP Executive Committee. Remarkably, the Platte RIP Governance Committee can act only by affirmative votes of nine out of its ten members, including all of the state and federal government representatives. These decision rules allow relatively small minorities—in some programs, even outliers—to keep a RIP from changing course over their objections.

4. Recovery Actions

Implementation efforts focus on a set of recovery actions, developed by each program to benefit the listed species in each basin.²⁷⁵ Each RIP has

^{268.} Platte River RIP ROD, *supra* note 211, at 19 (one vote each for the three states, one vote each for three categories of water users, two votes for conservation groups, and two votes for the Interior Department).

^{269.} Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 10. The initial membership is the same as the Collaborative Program Executive Committee. *See supra* note 254.

^{270.} Upper Colorado RIP Program Document, *supra* note 12, at 3-2 ("[O]ther agencies may participate if they execute an agreement in support of this program."); San Juan RIP Program Document, *supra* note 13, at 29 (no vote of the Coordination Committee needed if the State of Utah should sign the RIP cooperative agreement), 34 (indication that new participants may be added without them signing the cooperative agreement); Platte River RIP ROD, *supra* note 211, at 19 (no indication that Governance Committee may be expanded); Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 10-11 (describing process and criteria for adding new entities to the Executive Committee).

^{271.} Upper Colorado RIP Program Document, *supra* note 12, at 3-1. The document does not define "consensus."

^{272.} San Juan RIP Program Document, *supra* note 13, at 34. ("Unresolved issues will be referred for resolution to the Signatories" of the cooperative agreement for the RIP.).

^{273.} Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 13. However, certain matters can only be changed by unanimous consent, including provisions of the RIP declaring that the program will not impair water rights or compact obligations, that the RIP will acquire water only from willing sellers, and the "principles governing ESA compliance and regulatory predictability under the RIP." *Id.* at 13, 22–23. In all matters, however, the committee "shall seek consensus in reaching decisions." *Id.* at 13.

^{274.} Platte River RIP ROD, supra note 211, at 19.

^{275.} This statement is not meant to suggest that the years spent developing the plans were spent entirely on negotiations, particularly in areas of significant scientific uncertainty. For example, the Governance Committee requested a National Academy of Sciences review

generated (or will generate) a list of more-or-less specific measures relating to particular species and their ecosystems. These measures provide the elements of long-term plans designed to move the species toward recovery, and these plans guide the work and funding delivered by the programs. The San Juan RIP program document explains that the "Long Range Plan (LRP) identifies multi-year research, monitoring and recovery actions necessary to support the program's goals The LRP is the Program's research, monitoring, and implementation document."

A detailed, program-by-program review of recovery prescriptions is beyond the scope of this article, but each RIP has identified certain categories of actions that are necessary to help the species recover, or at least help the program understand what is needed for recovery. The San Juan RIP, for example, identifies five categories: (1) "protection, management, and augmentation of habitat," which includes providing adequate flows in the San Juan River and resolving barriers to fish passage; (2) "water quality protection and enhancement;" (3) "interactions between native and nonnative fish species," primarily involving efforts to reduce predation and competition from other types of fish; (4) "monitoring and data management," including assessing the status and trends of fish populations and the progress toward recovery; and (5) "protection of genetic integrity and management and augmentation of populations," which includes raising and stocking endangered fish while safeguarding the genetic diversity of the wild populations.²⁷⁹ The Upper Colorado RIP's five listed recovery elements are not much different 280 - not surprisingly, as this program

of the science underlying the Platte River program, which began in January 2003 and took over two years to complete. *See* Platte River RIP ROD, *supra* note 211, at 7–8.

^{276.} The Upper Colorado program refers to its long-term plan as the Recovery Implementation Program Recovery Action Plan (RIPRAP). The RIP program participants developed this plan "using the best, most current information available and the recovery goals for the four endangered fish species. It identifies specific actions and time frames currently believed to be required to recover the endangered fishes in the most expeditious manner in the Upper Basin." UPPER COLORADO ENDANGERED FISH RECOVERY PROGRAM, RECOVERY IMPLEMENTATION PROGRAM RECOVERY ACTION PLAN (RIPRAP), preface (2012), available at http://www.coloradoriverrecovery.org/documents-publications/foundational-documents/RIPRAP/RIPRAPapril4-03.pdf.

^{277.} The Middle Rio Grande RIP is still developing its long-term plan, but once completed it will become a "guidance document that provides an inventory describing beneficial activities that may be implemented by the RIP to meets its purposes and goals," and will provide a foundation "for the ongoing 5-year RIP Action Plan." Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 14–15.

^{278.} San Juan RIP Program Document, supra note 13, at 1, 13.

^{279.} *Id.* at 13, 14–21 (providing additional detail on these categories).

^{280.} The primary differences are that the Upper Colorado list has two habitat elements instead of one, and does not have a water quality category. *See* Upper Colorado RIP Program Document, *supra* note 12, at 1-6 to 1-8.

covers the same two fish species as the San Juan RIP, plus two others.²⁸¹ And the Middle Rio Grande RIP—driven primarily by the needs of the Rio Grande silvery minnow—can be expected to adopt similar categories of measures as the program takes shape.²⁸²

The Platte RIP recovery elements are different from the others in at least two notable respects. First, because three of the four target species are birds that rely on lands and meadows along the Central Platte River, ²⁸³ this program focuses more on riparian lands than the others. ²⁸⁴ One of its two major habitat goals is summarized as "Land Habitat Restoration: protect and/or restore 10,000 acres of habitat in the Central Platte area," ²⁸⁵ while the other is to provide an annual average of 130,000 to 150,000 acre-feet to improve flows in the Central Platte. ²⁸⁶ Second, the Platte RIP is explicitly incremental in its approach to habitat restoration: in the current "First Increment" of thirteen years, ²⁸⁷ the program seeks to provide only about one-third of land and water that FWS believes is required for the species' habitat needs. ²⁸⁸ In other words, the RIP is not seeking to meet all the habitat needs of the species in its first thirteen years, but only to provide a down payment of the necessary land and water for the Central Platte. ²⁸⁹

^{281.} The Upper Colorado RIP focuses on four listed fish species: the bonytail chub, Colorado pikeminnow (formerly called squawfish), humpback chub, and razorback sucker (which was listed after the RIP was created). Upper Colorado RIP Program Document, *supra* note 12, at 2-1. The San Juan RIP focuses on the Colorado pikeminnow and razorback sucker. San Juan RIP Program Document, *supra* note 13, at 9–10.

^{282.} The RIP's long-term plan will include "categories of RIP activities including: physical habitat restoration and management; water management; predator/non-native control; population augmentation/propagation (silvery minnow only); water quality management (silvery minnow only); research, monitoring and adaptive management; policies and laws; public information and outreach; and Program management." Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 14.

^{283.} The bird species are the interior least tern, piping plover, and whooping crane; the fish species is the pallid sturgeon. See PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM FINAL ENVIRONMENTAL IMPACT STATEMENT, SUMMARY, S-31 to S-33 (2006), available at https://www.platteriverprogram.org/PubsAndData/ProgramLibrary/TC-R190%20PRRIP%20FEIS%20Summary.pdf (last visited Jan. 25, 2013) [hereinafter Platte RIP FEIS Summary].

^{284.} *Id.* at S-36 to S-38 (describing habitat characteristics needed to benefit the species).

^{285.} Id. at S-35.

^{286.} *Id.* A third goal is to "test the assumption" that pallid sturgeon habitat in the Lower Platte can be improved by managing flows in the Central Platte. *Id.*

^{287.} See U.S. DEP'T OF THE INTERIOR, BUREAU OF RECLAMATION & FISH & WILDLIFE SERVICE, PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM FINAL ENVIRONMENTAL IMPACT STATEMENT, Vol. 1, at 1-1, 1-2 (2006).

^{288.} *Id.* at 1-3 (summarizing the FWS objectives of 29,000 acres of habitat protected/restored along the Central Platte, and average annual flow improvements of 417,000 acrefeet).

^{289.} See Platte River RIP ROD, supra note 211, at 4 ("Interior proposed a phased Program to address habitat restoration with the Program's First Increment achieving roughly

A common theme of the RIPs' approach to conservation is their reliance on adaptive management principles for making decisions. Adaptive management is a "learning by doing" approach that employs certain techniques: "identify key questions in relationship to multiple hypotheses, develop and utilize predictive tools to evaluate management action choices, design and implement management 'experiments,' conduct linked monitoring and research, and reassess hypotheses and management actions."²⁹⁰ A 2011 article by a member of the Platte RIP implementation team offers a detailed explanation of that program's use of adaptive management.²⁹¹ The Upper Colorado and San Juan RIP program documents do not use the term, but do call for decisionmaking using adaptive management principles.²⁹² The newer Middle Rio Grande RIP program document contains a whole section on the subject, declaring that the RIP will "use adaptive management as a structured and systematic approach for designing, implementing, monitoring and evaluating management actions to maximize learning about critical scientific questions and uncertainties that affect management decisions "293

5. Approach to Section 7 Compliance

As noted above, one of the two major purposes of every RIP is to ensure compliance with ESA section 7 for existing water use and management activities in the river basin, as well as for new water development actions.²⁹⁴ The approach to section 7 compliance is therefore a crucial feature of the Upper Colorado, San Juan, Platte, and Middle Rio Grande RIPs, and the program documents for each one address the matter in some detail. Here again, each program is somewhat unique, but several features appear in most or all of these RIPs.

292. See Upper Colorado RIP Program Document, supra note 12, at 4-20, 4-21 (describing research, monitoring, and data management as recovery elements); San Juan RIP Program Document, supra note 13, at 13-14 (describing the program's Long Range Plan as relying heavily on research and monitoring to develop recovery measures and assess their effectiveness).

one-third of these land and river flow improvements ... while allowing for monitoring and research to increase understanding of the species' needs and the most effective ways to provide habitat improvements."). Whether the Platte RIP will deliver further "payments" remains to be seen, however; additional land and water may depend on several factors, including results of studies on the habitat needs of the species.

^{290.} Chadwin B. Smith, Adaptive Management on the Central Platte River: Science, Engineering, and Decision Analysis to Assist in the Recovery of Four Species, 92 J. ENVTL. MGMT. 1414, 1416 (2011).

^{291.} Id.

^{293.} Middle Rio Grande RIP Draft Program Document, supra note 16, at 20.

^{294.} See supra notes 240-248 and accompanying text.

First, each RIP is meant to provide the necessary measures to avoid jeopardy (and adverse modification of critical habitat) that would otherwise result from federal actions relating to water management and development. Many such actions had already been the subject of section 7 consultations prior to development of the RIPs, and the FWS had issued jeopardy opinions based on flow depletions and other adverse effects on the species and their habitats.²⁹⁵ Anticipating more jeopardy opinions, the RIP participants intended that certain program recovery measures would provide the RPAs that would allow these actions to proceed.²⁹⁶ In the words of the Upper Colorado RIP, "Activities and accomplishments under the RIP are intended to provide the reasonable and prudent alternatives which avoid the likelihood of jeopardy to the continued existence of the endangered Colorado River fishes . . . resulting from depletion impacts of new projects and all existing or past impacts related to historic projects Providing predetermined RPAs is probably the most legally and practically important feature of the RIPs.²⁹⁸

Second, three of the four RIPs provide for ongoing FWS review to ensure the program is actually making progress, ²⁹⁹ considering both the implementation of recovery actions and the status of the species. ³⁰⁰ The San Juan RIP, for example, provides that at the time a section 7 consultation is initiated, FWS "will determine if progress toward recovery has been sufficient for the Program to serve as a reasonable and prudent alternative or measure," ³⁰¹ and will "assess the sufficiency of Program actions in proportion to the potential impacts of a proposed federal action." ³⁰² This type of

^{295.} See supra notes 223-230 and accompanying text.

^{296. &}quot;The RIP is intended to provide the reasonable and prudent alternatives for projects undergoing Section 7 consultation in the upper basin." UPPER COLORADO ENDANGERED FISH RECOVERY PROGRAM, AGREEMENT, SECTION 7 CONSULTATION, SUFFICIENT PROGRESS, AND HISTORIC PROJECTS § II (1993, revised 2000) [hereinafter Upper Colorado RIP § 7 Agreement].

^{297.} *Id.* § III.1. Certain discharges of pollutants by historic projects are not covered, however. The RIP is also intended to provide the RPAs that avoid destruction or adverse modification of critical habitat. *Id.*

^{298.} This feature is common to all the RIPs. See id. (Upper Colorado); San Juan RIP Program Document, supra note 13, at 69; Platte River RIP ROD, supra note 211, at 5 (providing RPA for previously completed consultations and "ESA offsetting measures" for not-yet-completed ones, including "the ongoing operations of Federal water projects in the Basin"); Middle Rio Grande RIP Draft Program Document, supra note 16, at 15–16, 19–20.

^{299.} The exception is the Platte RIP, which does not call for such periodic determinations by FWS, but only provides more generally for adaptive management and monitoring as program elements. Platte RIP FEIS Summary, *supra* note 283, at S-41, S-42.

^{300.} See Middle Rio Grande RIP Draft Program Document, supra note 16, at 16.

^{301.} San Juan RIP Program Document, supra note 13, at 69. The Upper Colorado RIP includes a similar provision. Upper Colorado RIP § 7 Agreement supra note 296, § III.5.

^{302.} San Juan RIP Program Document, *supra* note 13, at 69. The San Juan and Upper Colorado RIPs have nearly identical criteria for such determinations, addressing the benefits

determination is not triggered solely by new consultations, however. The San Juan RIP also requires the FWS every two years to prepare "a written 'Sufficient Progress' Assessment of the Program's Progress towards recovery, the Program's ability to provide ESA compliance for water development and management activities, and any corrective actions needed to ensure future ESA compliance, in accordance with the Program's Principles." Such "sufficient progress" determinations are made every year for the Upper Colorado RIP, 304 and the Middle Rio Grande RIP also requires the FWS to issue them annually. 305

Third, the RIPs requiring "sufficient progress" determinations give detailed instructions in case the FWS should determine that the program is not making sufficient progress to serve as an RPA. The first option in the San Juan and Upper Colorado is simply to specify which RIP recovery measures must be implemented in order to avoid jeopardy due to a particular action. If the FWS believes that the program does not include the necessary measure(s) to avoid jeopardy, however, it must give the RIP implementation committee the chance to resolve the issue. In the Middle Rio Grande, the FWS may document a lack of sufficient progress and formally ask the committee to remedy the issue; "It is fully intended that it will be feasible for the [committee] to take whatever corrective actions are needed to achieve sufficient progress and that resolution will occur." The San Juan RIP allows the committee to incorporate new measures suggested by FWS into the program's long-term plan, although that is "expected to be

of RIP actions for the species, the status of fish populations, the adequacy of flows, and the magnitude of impacts resulting from the activity undergoing consultation. *Id.* at 36; Upper Colorado RIP § 7 Agreement *supra* note 296, § II.

303. San Juan RIP Program Document, *supra* note 13, at 32. The FWS is also required to notify the RIP Coordination Committee in writing if the FWS "concludes, at any time and independent of any consultation, that the Program is not implementing actions on schedule, and that this may impact the ability of the Program to provide reasonable and prudent alternatives or measures." *Id.* at 71.

304. See U.S. FISH & WILDLIFE SERV., REGION 6, FINAL 2011–2012 ASSESSMENT OF "SUFFICIENT PROGRESS" UNDER THE UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM IN THE UPPER COLORADO RIVER BASIN, AND OF IMPLEMENTATION OF ACTION ITEMS IN THE JANUARY 10, 2005, "FINAL PROGRAMMATIC BIOLOGICAL OPINION ON THE MANAGEMENT PLAN FOR ENDANGERED FISHES IN THE YAMPA RIVER BASIN" 1-2 (July 18, 2012), available at http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/sufficientprogress/2012SufficientProgressMemo.pdf (indicating annual nature of "sufficient progress" determinations).

305. Middle Rio Grande RIP Draft Program Document, supra note 16, at 16.

306. San Juan RIP Program Document, *supra* note 13, at 70; Upper Colorado RIP § 7 Agreement, *supra* note 296, § III.6, at 2. The latter provision requires FWS to confer with the RIP Management Committee to identify such measures.

307. Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 17. If the problem is not resolved, the FWS may conclude that sufficient progress has not been maintained, which "may or may not trigger re-initiation of consultation." *Id.*

a rare event."³⁰⁸ The Upper Colorado RIP suggests that the committee may revise existing recovery measures as needed to "restore" the RIP as an RPA. ³⁰⁹ If that should fail, however, "as a last resort the FWS will develop" an RPA, working with the federal agency and project sponsor. ³¹⁰ In short, all these programs emphasize that the RIP provides the actions needed to avoid jeopardy, and should the FWS find that the RIP is falling short, the implementation committee is expected to find the solutions. ³¹¹

With this approach to ESA compliance, the RIPs seek to provide increased certainty—and perhaps decreased burdens—for water-related activities subject to section 7 consultation requirements. The Platte River RIP Environmental Impact Statement goes into remarkable detail on these points, not only stating that the RIP would "provide ESA 'regulatory certainty'" for covered activities, ³¹² but also detailing the stiffer requirements and greater costs that could result from consultations in the absence of a RIP. ³¹³ The Middle Rio Grande RIP says it most plainly, declaring that the program participants "intend that the inclusion of the RIP as the conservation measure in the new BO provides regulatory certainty under the ESA" for the covered actions. ³¹⁴

B. The Legal (and Political) Success of RIPs

This Article focuses primarily on the creation, structure and procedures of RIPs, rather than on their success in achieving their stated goals. One certainly could say, however, that the established RIPs in the Upper Colorado, San Juan, and Platte River Basins have succeeded from a *legal* standpoint. This is true in at least three respects, each involving a different branch of government.

- 308. San Juan RIP Program Document, supra note 13, at 70.
- 309. Upper Colorado RIP § 7 Agreement, supra note 296, § III.8, at 3-4.
- 310. Just in case anyone should miss the point, this statement is followed by the parenthetical, "(RIP participants recognize that such actions would be inconsistent with the intended operation of the RIP.)" *Id.*, § III.11, at 4.
- 311. This is true even though all the programs recite, in somewhat different terms, that final determinations regarding jeopardy remain with the FWS. *Id.*, §§ II, at 1-2; San Juan RIP Program Document, *supra* note 13, at 71; Middle Rio Grande RIP Draft Program Document, *supra* note 16, at 16.
- 312. See U.S. DEP'T OF THE INTERIOR, BUREAU OF RECLAMATION AND FISH & WILDLIFE SERV., PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM FINAL ENVIRONMENTAL IMPACT STATEMENT, Vol. 2, at 2 (2006).
- 313. *Id.* at 3–6. It also declared, "It is highly likely that the basin-wide costs to achieve ESA compliance for projects under separate section 7 consultations (nonstreamlined) would be greater than the costs associated with a cooperative, basinwide [RIP]." *Id.* at 11.
- 314. Middle Rio Grande RIP Draft Program Document, supra note 16, at 15–16.
- 315. It is too soon to say whether the brand-new Middle Rio Grande RIP will succeed in the same ways.

The first legal success involves ESA compliance, one of the two main purposes of these programs. In every situation thus far where FWS has determined whether a RIP does enough to avoid jeopardy, the RIP has passed the test. The FWS has issued an unbroken string of "sufficient progress" determinations for the Upper Colorado RIP from 1995 through 2012.316 The San Juan RIP has a much shorter record, but the FWS has found sufficient progress both times it has assessed the program (2005 and 2010);317 moreover, the FWS found sufficient progress in issuing a "no jeopardy" opinion for the new Navajo-Gallup Water Supply Project, 318 which will bring treated water from the San Juan River to many areas of the Navajo Nation that have lacked a potable water source. 319 The Platte RIP plan resulted in a 2006 "no jeopardy" opinion covering the effects of Reclamation project operations and other activities in the basin, ³²⁰ and the FWS has done hundreds of streamlined consultations relying on the program. 321 Thus, at the administrative level, the RIPs have delivered the envisioned section 7 compliance.

- 317. E-mail from David Campbell, San Juan River RIP, to author (Aug. 15, 2012, 07:03 MDT) (on file with author).
- 318. U.S. DEP'T OF THE INTERIOR, FISH & WILDLIFE SERV. FINAL BIOLOGICAL OPINION FOR THE NAVAJO-GALLUP WATER SUPPLY PROJECT 74–83 (2009), available at http://www.usbr.gov/uc/envdocs/EIS/navgallup/FEIS/vol2/Appdx-C/Appdx-C-pt3.pdf.
- 319. See Navajo-Gallup Water Supply Project, U.S. BUREAU OF RECLAMATION, http://www.usbr.gov/uc/rm/navajo/nav-gallup/index.html (last updated Dec. 3, 2012) (summarizing the Navajo-Gallup Water Supply Project, and noting that Congress authorized it through Pub. L. 111-11 in 2009).
- 320. See Platte River RIP ROD, supra note 211, at 17-18, 25-28.
- 321. "During the Cooperative Agreement Era (1997–2006), approximately 400 streamlined Section 7 consultations were done. To date, the U.S. Fish and Wildlife Service has provided nearly 100 streamlined Section 7 consultations since the Program began." PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM, BI-ANNUAL REPORT, 2009 & 2010 (2011), available at https://www.platteriverprogram.org/News/Documents/PRRIP Biannual Report 2009-2010.pdf.

^{316.} See Sufficient Progress Process, UPPER COLO. RIVER ENDANGERED FISH RECOVERY PROGRAM, http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/ sufficient-progress-letters.html (last visited Aug. 14, 2012). This page contains links to seventeen of these determinations, one for every year except 2007, which range in length from two pages (1995) to fifty-four pages (2009). Each one concludes that the RIP provides sufficient progress to avoid jeopardy for projects with depletions below a certain threshold, which has been 4,500 acre-feet since 2001. U.S. DEP'T OF THE INTERIOR, FISH & WILDLIFE SERV., REGION 6, SUFFICIENT PROGRESS/SECTION 7 CONSULTATIONS—UPPER COLORADO RIVER RECOVERY PROGRAM (July 20, 2001), available at http://www.coloradoriverrecovery.org/ documents-publications/section-7-consultation/sufficientprogress/2001July20.pdf. For several years in the last decade, however, the FWS stated that it was "very concerned about recent downward trends in endangered fish populations." See, e.g., U.S. DEP'T OF THE INTERIOR, FISH & WILDLIFE SERV., REGION 6, FINAL 2007-2008 ASSESSMENT OF "SUFFICIENT PROGRESS" UNDER THE UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM IN THE UPPER COLORADO RIVER BASIN (July 3, 2008), available at http://www.coloradoriverrecovery.org/ documents-publications/section-7-consultation/sufficientprogress/2008Jul03.pdf.

Second is litigation—or rather the absence of it—over whether the RIPs are meeting ESA requirements. The Upper Colorado and San Juan RIPs have for years provided section 7 compliance for over 2,300 water projects, including every USBR project in the Upper Colorado River Basin, with no lawsuits challenging the adequacy of this compliance. Neither has the Platte RIP been the subject of ESA litigation, despite the number and significance of the projects relying on the program for their section 7 compliance. The judiciary has decided many cases regarding federal water projects and endangered species in the last twenty years, but the RIPs have been remarkably successful in keeping these issues out of the courts.

Third, Congress has acted to provide authority and funding for implementation of the three established RIPs. The first statute came in 2000,³²⁶ authorizing up to \$46 million for the USBR to carry out capital projects under the Upper Colorado and San Juan programs,³²⁷ and also allowing the Interior Secretary to use up to \$6 million in Colorado River Storage Project hydropower revenues for annual base funding of the RIPs.³²⁸ Over time, Congress extended the authority and increased the funding for capital projects;³²⁹ the 112th Congress extended the base funding through 2019 by approving a bipartisan bill, H.R. 6060.³³⁰ The Platte RIP got its authorizing legislation in 2008,³³¹ allowing the Secretary to take certain actions in

^{322.} Endangered Fish Recovery Programs Extension Act of 2012: Hearing on H.R. 6060 Before the H. Comm. on Natural Resources, Water and Power Subcommittee, 112th Cong. (2012) (statement of John W. Shields, Interstate Streams Engineer, Wyoming State Engineer's Office) [hereinafter Shields Testimony].

^{323.} Telephone Interview with Jerry Kenny, Executive Director, Platte River Recovery Implementation Program, in Kearney, Neb. (Aug. 16, 2012).

^{324.} See Platte River RIP ROD, supra note 211, at 25–27 (six existing water projects on the Colorado Front Range requiring special use permits from the U.S. Forest Service; major hydropower projects in Nebraska requiring relicensing by the Federal Energy Regulatory Commission; USBR water projects on the North Platte; and a large number of "small depletions" projects).

^{325.} See supra notes 6-10 and accompanying text.

^{326.} Upper Colorado and San Juan River Basins Endangered Fish Recovery Programs, Pub. L. 106-392, 114 Stat. 1602 (2000).

^{327.} *Id.* § 3(a), 114 Stat. 1603. The total cost of these capital projects was capped at \$100 million, *id.* § 3(b), and the statute identified the sources of the other \$54 million. *Id.* § 3(c), 114 Stat. 1604.

^{328.} These expenditures were capped at \$4 million per year for the Upper Colorado and \$2 million per year for the San Juan in 2000 dollars, to be adjusted for inflation over time. *Id.* § 3(d), 114 Stat. 1604–1605.

^{329.} See Shields Testimony, supra note 322 (summarizing statutory changes made in the 107th, 109th, and 111th Congresses).

^{330.} Pub. L. 112-270 (2013), introduced as the Endangered Fish Recovery Programs Extension Act of 2012, H.R. 6060, 112th Cong. (2012) (introduced with eight Republican and five Democratic cosponsors).

^{331.} Consolidated Natural Resources Act of 2008, Pub. L. No. 110-229, § 515, 122 Stat. 754, 847 (2008).

implementing the program³³² and authorizing over \$157 million in federal money.³³³ Thus, Congress has not only shown its support of the RIPs, but has backed that support with significant investments in federal resources.

These attributes—highly reliable section 7 compliance for the water sector, cooperation rather than litigation over ESA requirements, and significant federal contributions to these programs—have earned the RIPs political support from western states, water users, and political officials who are not known as enthusiastic supporters of the Endangered Species Act. For example, eight House Republican members of the conservative Western Caucus were original co-sponsors of H.R. 6060, 334 even though the caucus's website harshly criticizes the ESA and suggests the law should be scrapped.335 Testifying in support of this bill, a Wyoming state official described "substantial grassroots support" from the federal, state, tribal, and stakeholder participants in the Upper Colorado and San Juan RIPs: "These diverse interests continue to demonstrate that working cooperatively produces far greater results than independent efforts."336 Another witness explained that he had once supported repeal and replacement of the ESA, but he now supported H.R. 6060 on behalf of several Colorado water suppliers,

because it is the best way to avoid uncertainty and the economic and social costs experienced by other areas of the West that have been plunged into chaos by conflicts between water supply needs and endangered species. The risks of not having a successful Program are far too great [T]hose risks include years of litigation at best, and potentially a devastating disruption of water supplies that are critically important to cities, agriculture and industry. 337

^{332.} *Id.* § 515(b)(2).

^{333.} *Id.* § 515(b)(6), 122 Stat. 849.

^{334.} Reps. Bishop and Chaffetz (both from Utah), Lummis (Wyoming), Pearce (New Mexico), Gosar (Arizona), and Tipton, Gardner, and Coffman (all from Colorado), all Republicans, are listed as sponsors of H.R. 6060, 112th Cong. (2012). All of them are also listed as members of the Western Caucus for the 112th Congress. *Membership*, CONG. W. CAUCUS, http://www.westerncaucus.pearce.house.gov/index.cfm?sectionid=62§iontree=2,62 (last visited Aug. 16, 2012).

^{335.} The caucus charges the ESA with "the dramatic destruction of property rights and the failure to recover species If environmentalists and politicians really cared about the animals, they would get rid of the Act and give landowners the freedom to do what they do best—produce necessary resources while taking care of the land and all who inhabit it. ESA has been a failure . . . "Issues, CONG. W. CAUCUS, http://www.westerncaucus.pearce.house.gov/issues1 (last visited Aug. 16, 2012).

^{336.} Shields Testimony, *supra* note 322, at 2.

^{337.} Endangered Fish Recovery Programs Extension Act of 2012: Hearing on H.R. 6060 Before the H. Comm. on Natural Resources, Water and Power Subcommittee, 112th Cong. (2012) (statement of Bennett W. Raley, attorney representing the Northern Colorado Water

On the other hand, four of the five House Democrats sponsoring the bill have strong lifetime voting scores from the League of Conservation Voters (LCV); ³³⁸ Colorado Senator Mark Udall has a nearly perfect lifetime LCV score, ³³⁹ and he was lead sponsor of the Platte RIP authorizing legislation while serving in the House. ³⁴⁰ Thus, although some political support for RIPs comes from people who oppose the ESA for its "environmental radicalism," ³⁴¹ the established programs have also drawn support from those with strong conservation credentials.

In short, both legally and politically, these programs represent a real departure from the usual ESA approach. While their ultimate goal is recovery, they also provide a different means of avoiding jeopardy to listed species than the usual section 7 consultation process. The next section analyzes some of these differences in considering the popularity of the RIPs and their prospects for future success.

IV. ANALYSIS: QUESTIONS ABOUT THE POPULARITY AND FUTURE OF RIPS FOR WESTERN WATERS

Recovery Implementation Programs have become an accepted means of ESA compliance and an established part of the water management regime in the western United States. While the RIPs have done well in legal and political terms, this success raises questions about the reasons for their popularity, the chances that they can actually recover listed species, and the prospects that they will become even more important over time.

Conservancy District) (declaring support for the bill from the Front Range Water Council, a coalition of entities supplying water to several major cities in Colorado).

^{338.} Democratic Reps. Coffman, DeGette, and Polis (Colorado), Lujan (New Mexico) and Matheson (Utah) are all listed as sponsors of H.R. 6060, 112th Cong. (2012). The League of Conservation Voters keeps an annual scorecard of key environmental votes in Congress, and gives individual members a percentage rating, with the highest percentages being the most pro-environment. See, e.g., LEAGUE OF CONSERVATION VOTERS, NATIONAL ENVIRONMENTAL SCORECARD '10 at 1 (2011). Through 2010, three of H.R. 6060's Democratic cosponsors had lifetime LCV scores of at least 96% (DeGette, Lujan, Polis), Perlmutter was at 86%, and Matheson was at 64%. Id. at 22, 29, 35.

^{339.} Id. at 10 (97% through 2010).

^{340.} See H.R. REP. No. 110-393, at 5 (2007).

^{341.} See Laura Petersen, Endangered Species: House GOP Touts Fish Recovery Programs But Still Demands ESA Reforms, ENV'T & ENERGY DAILY, July 11, 2012 (quoting House Water and Power Subcommittee Chairman Tom McClintock, who also stated, "This and future Congresses still have a lot of work to do in reforming the Endangered Species Act, but in the meantime, [H.R. 6060] offers some common-sense solutions").

A. Why Have RIPs Caught On in the Western Water Context?

Several factors may explain why RIPs have become a preferred means of ESA compliance in western river systems with major USBR water projects. These factors largely reflect familiar concerns and priorities of water users and managers in the West.

First, the established RIPs have proved reliable in ensuring section 7 compliance for federal actions relating to water management, development, and use. They have not only produced a steady stream of findings that jeopardy will be avoided, but have done so without serious interference with established or planned water use activities, and without litigation. In other words, they have effectively kept project operations and water uses on the Upper Colorado, San Juan, and Platte from a wrenching and contentious, Klamath-style disruption.

Second, these programs have increased the importance of states in carrying out the ESA. In contrast to the very limited role for states in the typical consultation process, 342 the RIPs give them significant authority in determining the measures needed for section 7 compliance, and in overseeing implementation of these measures. The western states have sought greater influence in ESA decisionmaking; the Western Governors' Association (WGA) has stated, "The Endangered Species Act can effectively be implemented only through a full partnership between the states, federal government, local governments, and private landowners." The RIPs provide that kind of partnership (for the states at least), and an enhanced role is particularly vital to them in the water resource context, where the western states have zealously guarded their authority over allocation and management.

Third, RIPs can provide a corresponding benefit to the USBR and project water users by involving more entities in activities to benefit listed species and their habitats. The standard section 7 approach focuses on a particular federal action, such as operation of a reclamation project, and requires avoidance of jeopardy that might be caused by that one action—even where the species is in trouble due to a variety of other actions, such as non-project water use. Those parties associated with a project going through consultation may feel they are carrying an unfair burden to save the species, as reflected in Interior's failed attempt to limit its responsibility for Klamath River ESA flows to its proportionate share of Klamath Basin water

^{342.} See supra notes 104-105 and accompanying text.

^{343.} WESTERN GOVERNORS' ASS'N POLICY RES. 10-12, ENDANGERED SPECIES ACT 3 (2010). This policy statement calls for ESA reauthorization consistent with four basic principles, one of which is to "[e]nhance the role of state governments in recovering species." *Id*.

use.³⁴⁴ This explains the Interior Secretary's statement, in support of the Platte River RIP, that involving all major water users "allows for a more equitable distribution of effort than what might occur under separate project consultations. Separate project consultations do not focus on issues of equity and fair share, but rather focus only on offsetting the effects of the project currently in consultation."³⁴⁵

Fourth, the established RIPs have enjoyed relatively secure funding under their federal authorizing legislation—particularly the two RIPs that have received a dedicated share of federal hydropower revenues in the Colorado River Basin. They also provide an opportunity for non-federal entities to bear part of the expense of program implementation, although the vast majority of the money is still federal. Whatever their source, funds need to be reliably available, particularly in those programs that must regularly show "sufficient progress" in implementation. For the San Juan RIP, "[f]unding reliability is critical to the success of the Program to ensure that the Program is conducted on a continuous basis and that high priority recovery elements are funded every year."

Fifth, in addition to reliable funding, RIPs may provide certain benefits for species that might be difficult or impossible to achieve under a typical section 7 consultation. The Interior Secretary emphasized this point in approving the Platte RIP, explaining that water released from upstream federal projects may need to travel hundreds of miles to reach the key habitat in the Central Platte. This water "often crosses state lines and always passes many diversion points. Without the cooperation and assistance of the states and other water users, much of the water being moved to the Central Platte Habitat Area could be diverted or stored by other projects." Similarly, protecting endangered fish from predation or competition by non-native

^{344.} Because the federal Klamath Project represented 57% of Klamath Basin irrigation, the 2002 BO for project operations required the project to provide only 57% of the necessary flows for most of the period it covered. *See supra* notes 148–154 and accompanying text.

^{345.} Platte River RIP ROD, supra note 211, at 6.

^{346.} These revenues do not depend on annual appropriations. As noted above, Congress recently renewed the hydropower funding for the Upper Colorado and San Juan RIPs. See supra notes 327–337 and accompanying text.

^{347.} See infra notes 367–370 and accompanying text. Non-federal funds could come from water users or water project sponsors as well as states. The Upper Colorado RIP has always provided for non-federal water project proponents to pay a small fee to FWS based on the amount of water the new project would deplete—originally \$10 per acre-foot—with the proceeds split evenly between acquisition of water for instream flows, and other recovery activities. Upper Colorado RIP Program Document, supra note 12, at 5-4. It appears, however, that such "depletion charges" were never expected to be a major source of funding for the program. Id. at 5-3.

^{348.} See generally supra notes 299-305 and accompanying text.

^{349.} San Juan RIP Program Document, supra note 13, at 42.

^{350.} Platte River RIP ROD, supra note 211, at 5-6.

fish—a key feature of both the Upper Colorado and San Juan RIPs³⁵¹—may be very difficult to achieve without the cooperation of state fish and wildlife authorities. Thus, while the RIPs have obvious benefits for states, water users, and the USBR, they also offer some advantages for listed species.

One might say that these programs have become popular for many of the same reasons that settlements have become the preferred means of resolving tribal Winters claims—that is, many of the perceived advantages of RIPs over typical section 7 consultations are similar to the perceived advantages of settlements over litigation of tribal reserved rights. 352 For the western states, benefits include a prominent "seat at the table" where decisions are made, and the resulting power to protect their water users from disruption or uncertainty that might otherwise result from implementation of federal law. Just as settlements often give tribes some tangible benefits, including funding, that would be difficult to obtain through adjudication of water rights alone, the RIPs may offer similar gains for listed species that consultation ordinarily would not. And both RIPs and Winters settlements allow all parties, including the United States, to avoid the cost and uncertainty of litigation, and at least some of the acrimony that can result from a hard-fought legal and political battle over water. Of course, advocates for tribes and listed species might find similar, legitimate reasons to criticize the negotiated approaches for diluting the benefits that should have flowed from Winters³⁵³ and the ESA,³⁵⁴ respectively. But in the context of western

^{351.} See supra note 279 and accompanying text.

^{352.} For a brief summary of tribal water right settlements, see *supra* notes 44–48 and accompanying text.

^{353.} In an article focusing on *Winters* claims to restore streamflows for the benefit of tribal fisheries, Michael Blumm and his co-authors stated, "[a]lthough tribal reserved water rights claims may open the door to discussions about streamflow restoration, in practice the McCarran Amendment Era has reduced these claims to mere bargaining chips rather than vehicles for achieving the purpose of reservations through streamflow restoration." Michael C. Blumm et al., *The Mirage of Indian Reserved Water Rights and Western Streamflow Restoration in the McCarran Amendment Era: A Promise Unfulfilled*, 36 ENVTL. L. 1157, 1161 (2006); see also Thomas P. Schlosser, *Dewatering Trust Responsibility: The New Klamath River Hydroelectric and Settlement Agreements*, 1 WASH. J. ENVTL. L. & POL'Y 42 (2011) (criticizing, from the standpoint of tribal resource protection, the negotiated agreements in the Klamath Basin, discussed *supra* notes 190–198 and accompanying text).

^{354.} In an article analyzing the application of the ESA to restore native fish in the Columbia and Upper Colorado Rivers, Mary Wood concluded that "the Services in both basins may be straying far from the ESA's mandate of conserving ecosystems upon which imperiled species depend. . . . Applying section 7 in this way, the ESA becomes, in effect, statutory permission for perpetuating a status quo harmful to species." Mary Christina Wood, Reclaiming the Natural Rivers: The Endangered Species Act as Applied to Endangered River Ecosystems, 40 ARIZ. L. REV. 197, 251–52 (1998). "The implementation of the ESA in both basins has suffered from an unwillingness to force changes to the Developed River, despite section 7's strong mandate calling upon federal agencies to 'insure' that their actions are not likely to jeopardize the continued existence of species." Id. at 284.

water resources, where certainty and state authority are fiercely held and widely recognized values, it is not surprising that federal law evolved to accommodate them.

B. Can the RIPs Actually Succeed in Recovering Listed Species?

Much of this Article focuses on the RIPs as an alternative to the usual approach to ESA consultation, and as discussed above, these programs have been regarded as successful largely because they have provided consistent and predictable section 7 compliance. Their very name, however, indicates another way that these programs differ from standard consultations: their goal is to recover threatened and endangered species, not just to avoid jeopardy caused by federal actions. In the context of dramatically altered and heavily utilized western river systems, however, this goal of recovery is exceedingly ambitious.

While promoting recovery certainly *sounds* better for listed species than simply avoiding jeopardy, it is fair to question whether even that more modest goal might be better served by the usual section 7 approach: consultation on a federal action, a BO with an RPA that focuses specifically on that action (assuming the BO finds jeopardy), and possibly judicial review of the BO. Some might point to the cases upholding ESA obligations for fish in the Klamath³⁵⁶ and Middle Rio Grande³⁵⁷ and argue that so long as the courts continue to insist that saving endangered species remains "the highest of priorities,"³⁵⁸ the standard consultation process—with rigorous judicial oversight—remains the best hope for ensuring that listed species and their habitat get the water they need.³⁵⁹

A broader view of the record, however, shows that ESA section 7 has had very mixed results, legally speaking, in protecting species from harm caused by existing federal water projects. Three cautionary points emerge from the earlier discussion of the Lower Colorado, Klamath, and Middle

^{355.} The success of these programs in ensuring compliance with the ESA, however, should not be mistaken for success in achieving recovery of listed species. The Upper Colorado RIP has been criticized for focusing too much on the former: "If consensus-based management were not a virtually automatic route to [RPA] status, measures of success would rely less on bureaucratic process and more on progress toward species recovery." Ann Brower, Chanel Reedy & Jennifer Yelin-Kefer, Consensus versus Conservation in the Upper Colorado River Basin Recovery Implementation Program, 15 CONSERVATION BIOLOGY 1001, 1005 (2001) ("[A]ctual population growth, rather than bureaucratic accomplishments, should serve as the appropriate gauge.").

^{356.} See supra notes 152-158 and accompanying text.

^{357.} See supra notes 169-176 and accompanying text.

^{358.} See supra notes 1–3, 89–90 and accompanying text (discussing the Supreme Court decision in TVA v. Hill and its famous "highest of priorities" quote).

^{359.} See Wood, supra note 354, at 252-85 (arguing for stronger judicial oversight of ESA decisions regarding river operations to promote recovery of listed species).

Rio Grande consultations. 360 First, in all three basins, the relevant Service issued a BO that arguably protected the federal project's established operations far better than it protected the listed species.³⁶¹ Second, the Services did have some success in the courts, winning preliminary rounds in both the Middle Rio Grande³⁶² and the Klamath,³⁶³ and of course prevailing on the Lower Colorado when the Ninth Circuit held that the FWS had broad discretion in choosing an RPA.³⁶⁴ Third, the legal victories for listed species were not the end of the story, either in the Klamath—where the Ninth Circuit decision invalidating the BO was followed by lengthy multilateral negotiations on a broader agreement for the basin³⁶⁵—or in the Middle Rio Grande, where Congress quickly passed an appropriations rider partially overturning the court cases and blocking judicial review of the new BO. 366 In short, it is difficult to say whether the standard section 7 approach would be superior to a RIP in preventing jeopardy, because it is so hard to predict how the usual consultation-and-litigation sequence would play out in a particular basin. 367

Federal project operations may be slow to change even where the courts insist on stronger measures to save listed species, as shown by the neverending battle over the ESA and the Federal Columbia River Power System. Plaintiffs committed to saving Pacific Northwest salmon have had great

^{360.} See supra Part II.B.

^{361.} See supra notes 133–134, 144–145, and 170–171, and accompanying text. The 2002 Middle Rio Grande BO was the most extreme in this regard, finding jeopardy, providing no RPA, but still allowing project operations to continue.

^{362.} Rio Grande Silvery Minnow v. Keys, 469 F. Supp. 2d 973 (D.N.M. 2002) (upholding 2001 BO even though the government was wrong regarding its discretion to provide project water for listed species).

^{363.} See Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 426 F.3d 1082, 1089 (9th Cir. 2005) (noting that litigation began with a request by plaintiffs for a temporary restraining order, denied by the district court); *id.* at 1090 (explaining that district court had overturned one aspect of the 2002 Klamath BO but upheld the rest, and leaving the BO and RPA in place while it was revised) (9th Cir. 2005).

^{364.} Sw. Center for Biological Diversity v. U.S. Bureau of Reclamation, 143 F.3d 515, 523 (9th Cir. 1998).

^{365.} See supra notes 188-194 and accompanying text.

^{366.} See supra notes 176–184 and accompanying text. The Tenth Circuit vacated its controversial 2003 decision as moot early the following year. Rio Grande Silvery Minnow v. Keys, 355 F.3d 1215 (10th Cir. 2004). Years later the Tenth Circuit vacated all the decisions in the litigation, based on mootness. Rio Grande Silvery Minnow v. U.S. Bureau of Reclamation, 601 F.3d 1096 (10th Cir. 2010).

^{367.} John Echeverria acknowledged this point in an article that was otherwise quite critical of the collaborative approach to ESA compliance on the Platte. "It is simply impossible to know what might have transpired if [Interior] had pursued one of several other political strategies." Echeverria, *supra* note 226, at 561. He also noted that the Platte collaborative program apparently helped turn back efforts in the 1990s to weaken the ESA, and that "[p]erhaps nothing more is needed to declare the Platte program a success in these terms." *Id.* at 592.

success in challenging a string of BOs on the operation of federal hydropower dams on the Columbia and Snake Rivers. Moreover, a recently retired U.S. district judge has worked doggedly to hold the federal agencies accountable, taking extraordinary measures in prodding them to produce a BO that can pass legal muster. As chronicled by Michael Blumm, however, the federal agencies have continually resisted making major changes in the hydropower system to benefit the salmon, seeking instead to avoid jeopardy through measures such as projected habitat improvements in Columbia and Snake River tributaries. Today, federal operations on the Columbia remain out of compliance with the ESA, rearly two decades after a federal judge declared that the approach to salmon protection was seriously flawed because it is too heavily geared towards a status quo that has allowed all forms of river activity to proceed in a deficit situation—that is, relatively small steps, minor improvements and adjustments—when the situation literally cries out for a major overhaul."

The point is that federal water projects—especially big ones providing major economic benefits—present a formidable challenge for ESA implementation. I am not suggesting that the challenge is too great for the usual section 7 approach, or that the standard consultation-and-litigation model has not resulted in real benefits for listed species in this context. But certain

^{368.} See Michael C. Blumm & Aurora Paulsen, The Role of the Judge in ESA: District Judge James Redden and the Columbia Basin Salmon Saga, 32 STAN. ENVTL. L.J. (forthcoming 2013) (describing this litigation from the mid-1990s to the present, including the remand of multiple BOs on Columbia—Snake operations).

^{369.} *Id.* (manuscript at 30–64) (analyzing the role of District Judge Redden in pursuing adequate remedies under the ESA).

^{370.} Blumm has described the federal agencies as "practiced at the art of deception" in implementing the ESA on the Columbia. Michael C. Blumm & Erica Thorson, Practiced at the Art of Deception: The Failure of Columbia Basin Salmon Recovery under the Endangered Species Act, 36 ENVTL. L. 709 (2006); Michael C. Blumm & Hallison T. Putnam, Imposing Judicial Restraints on the "Art of Deception": The Courts Cast a Skeptical Eye on Columbia Basin Salmon Restoration Efforts, 38 ENVTL. L. 47 (2008).

^{371.} One fairly recent development is the Columbia Basin Fish Accords of 2008, involving the Bonneville Power Administration, the Corps of Engineers, the USBR, four Columbia Basin tribes and two states. According to Bonneville, these agreements "will result in numerous new projects and dedicated funding for certain on-going projects (such as watershed restoration programs) throughout the Columbia River Basin for the next 10 years. The agreements also mark a turning point for the parties, ushering in a collaborative partnership rather than continuing with an adversarial relationship." BONNEVILLE POWER ADMIN., ADMINISTRATOR'S RECORD OF DECISION, 2008 COLUMBIA BASIN FISH ACCORDS 1 (May 2, 2008), available at energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/EIS-0312-ROD-01-2008.pdf.

^{372.} Nat'l Wildlife Fed. v. Nat'l Marine Fisheries Serv., 839 F. Supp. 2d 1117 (D. Or. 2011) (finding the 2008/2010 BO for the Federal Columbia River Power System arbitrary and capricious).

^{373.} Idaho Dep't of Fish & Game v. Nat'l Marine Fisheries Serv., 850 F. Supp. 866, 900 (D. Or. 1994), vacated as moot, 56 F.3d 1071 (9th Cir. 1995).

tough realities seem undeniable: the construction and operation of federal water projects has dramatically altered western river ecosystems, often to the grave detriment of native species; large numbers of people and dollars now depend on continuing established operations of these projects; and major operational changes will meet powerful and determined resistance, even if scientists and federal judges insist that such changes are needed for the survival of listed species.

If avoiding jeopardy is so daunting in this context, can recovery even be realistic? The answer will of course depend on the specific factors affecting a particular species, and the feasibility of addressing those factors without major changes in water management. It is possible that some species can be restored through measures such as stocking, small-scale habitat restoration, and fish passage improvements. But Dale Goble's analysis of successful recovery efforts³⁷⁴ shows that for most of the delisted species, "their decline was primarily a result of a specific, eliminable threat . . . and—the factor that may have trumped the rest—the species are habitat generalists that can flourish in human-impacted environments." Many of the West's native fishes, facing multiple threats and requiring more natural river conditions than those prevailing today, ³⁷⁶ do not fit this pattern. And any species whose basic habitat needs conflict with established water project operations is likely to face a long and uncertain road to recovery. ³⁷⁷

To their credit, the RIP program documents do not undersell the magnitude of the task, either in the range of measures needed to benefit the species³⁷⁸ or in the time that may be required to achieve recovery.³⁷⁹ The Upper Colorado RIP stated at the outset that recovery "will involve a massive, long-term program of 15 years and will succeed only with the close cooperation of all affected parties."³⁸⁰ That was in 1987, yet today the four

^{374.} See Dale D. Goble, The Endangered Species Act: What We Talk About When We Talk About Recovery, 49 NAT. RESOURCES J. 1, 22 (2009) (identifying common elements of species that were recovered to the point where they could be delisted under the ESA).

^{375.} Dale D. Goble, A Fish Tale: A Small Fish, the ESA, and Our Shared Future, 40 ENVTL. L. 339, 354 (2010). Goble identified an additional factor: the adequacy of pre-existing regulatory mechanisms to protect the species after delisting. Id.

^{376.} See, e.g., San Juan RIP Program Document, supra note 13, at 9 (listing several human-caused impacts on San Juan River native fishes); Upper Colorado RIP Program Document, supra note 12, at 6-1 to 6-4 (listing factors for decline of four native Upper Colorado fish species).

^{377.} See generally Marian Lyman Kirst, Pallids in Purgatory, HIGH COUNTRY NEWS, Sept. 17, 2012, at 10 (describing obstacles to recovering the endangered pallid sturgeon in the heavily developed and altered Missouri River system).

^{378.} See supra notes 275–289 and accompanying text.

^{379.} The Platte RIP suggests that restoring Central Platte habitat will be a forty-year effort, with the program currently seeking to do the first third of the job in its initial thirteen years. See supra notes 287–289 and accompanying text.

^{380.} Upper Colorado RIP Program Document, supra note 12, at 3-1.

Upper Colorado native fish species remain on the endangered species list, ³⁸¹ where two of them have resided since 1967. ³⁸² The inability to achieve recovery may be viewed as a failure of the RIP, but that seems a harsh assessment given the challenges of restoring aquatic species while allowing uninterrupted water use and development. ³⁸³ So long as the West remains unwilling to "jeopardize" hydropower production or consumptive water uses for the sake of restoring fish habitat, recovery of many native species will remain a nearly impossible task.

C. Are RIPs the Way of the Future?

Whatever the challenges RIPs may face in recovering species, their demonstrated success in legal and political terms³⁸⁴ suggests that we may see a push to establish them in other basins where the ESA has implications for water project operations. But while the RIPs have clear advantages (especially for states and water users) that may make them a popular choice,³⁸⁵ the larger legal and political context raises questions about their future. These questions apply even to the existing programs, all of which allow any signatory to withdraw.³⁸⁶

A major reason why RIPs have gained support, at least among water users, ³⁸⁷ is fear of the alternative: the dreaded "next Klamath," where application of the ESA to water project operations could significantly reduce water supplies for existing users, causing economic losses and political controversy. This threat may become less worrisome, however, either through rule or statutory changes if the White House or Capitol Hill seeks to weaken the ESA, or through case law if the courts decide that the USBR has limited discretion to change project operations for the benefit of listed

^{381.} See Species Reports, U.S. FISH & WILDLIFE SERV., http://www.ecos.fws.gov/tess_public/pub/listedAnimals.jsp (last visited Jan. 26, 2013) (listing the bonytail chub, Colorado pikeminnow, humpback chub, and razorback sucker as endangered).

^{382.} See Endangered Species Program, U.S. FISH & WILDLIFE SERV., http://www.fws.gov/endangered/species/faq-first-species-listed.html (last visited Jan. 26, 2013) (explaining the original endangered species list under a 1966 forerunner to today's ESA; species listed include the Colorado squawfish (now pikeminnow) and humpback chub).

^{383. &}quot;Given the obvious conflicts between those who want to develop the water and those who want to retain instream flows, it would have been surprising if consensus-based management in the Colorado River had been effective at recovering the fishes while developing water use." Brower et al., *supra* note 355, at 1006.

^{384.} See supra Part III.B.

^{385.} See supra notes 342-354 and accompanying text.

^{386.} COOPERATIVE AGREEMENT FOR RECOVERY IMPLEMENTATION PROGRAM FOR ENDANGERED SPECIES IN THE UPPER COLORADO RIVER BASIN, *supra* note 216, at 2 (1988); PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM COOPERATIVE AGREEMENT, *supra* note 15, at 3; SAN JUAN RIP PROGRAM DOCUMENT, *supra* note 13, at 48.

^{387.} See supra note 337 and accompanying text (Bennett Raley remarks).

species.³⁸⁸ And if the ESA becomes less fearsome to western states and water users, they are likely to ask themselves why they should participate in a time-consuming and seemingly endless ESA collaborative program.³⁸⁹

Federal spending cuts represent another potential problem for RIPs. With the exception of the Platte, where half of program costs are borne by the states, the RIPs are overwhelmingly paid for with federal dollars. But the current Congress has pushed to cut discretionary spending, and agency budgets may shrink significantly in the coming years. If the RIPs lack reliable federal funding, they may find it hard to maintain "sufficient progress" toward recovery, putting the programs at risk of failing to provide section 7 compliance. In addition, slippage in implementation could mean that environmental groups abandon the RIPs, potentially shifting them from participants to plaintiffs. Perhaps the programs could survive budget cuts, perhaps the states and/or water users could increase their contributions, perhaps the RIPs could keep all their key players at the table . . . but if federal funding for the RIPs should dry up, their future is in doubt.

The RIPs may have gained support because they involve federal, state, and local entities cooperating to protected endangered species,³⁹³ but in today's political climate they could draw *opposition* on that basis. If hardcore conservatives portray the ESA as a broken law needing reform, the federal government as a heavy-handed oppressor, and political compromise as a betrayal of principle, some western politicians may hesitate to embrace even

^{388.} See, e.g., Grand Canyon Trust v. Bureau of Reclamation, 2012 WL 3264499 at *6–9 (9th Cir. 2012) (finding the USBR's annual operation of Glen Canyon Dam nondiscretionary for section 7 purposes); Benson, supra note 96, at 40–51 (analyzing the USBR's discretion for section 7 purposes, and arguing that project operations should normally be considered discretionary).

^{389.} One Wyoming state official said in 2004 that he did not like the Platte River collaborative process, but that Wyoming would stay in it so as to prevent "another Klamath." Andrew Beck Grace, *Truce Holds on the Platte River*, HIGH COUNTRY NEWS (Aug. 16, 2004), http://www.hcn.org/issues/280/14930.

^{390.} See Amena H. Saiyid, Alan Kovski, and Jonathan Nicholson, Environmental Programs Would Take Hit Under Reductions Outlined in Budget Act, 43 ENV'T REP. 2422 (2012) (explaining a White House report detailing budget cuts—including a \$196 million cut to the FWS budget—under automatic reductions agreed to by Congress and the White House in 2011).

^{391.} See supra notes 306-311 and accompanying text.

^{392.} These problems may be especially acute for the Middle Rio Grande RIP, as this new program has neither authorizing legislation nor environmental participation as of this writing.

^{393.} As then-Congressman John Salazar of Colorado said of the Upper Colorado and San Juan RIPs in 2006, "This program can serve as a national model for public and private partnerships for endangered species recovery. It allows water development in accordance to [sic] the State and Federal laws to continue while the partners work to recover the endangered fish species." 152 CONG. REC. H653 (daily ed. Mar. 8, 2006) (statement of Rep. Salazar).

these "successful" programs. Such reluctance could doom new efforts to resolve ESA issues collaboratively, such as the negotiated agreement in the Klamath Basin which is now in limbo due to opposition from the Tea Party, and may even cause some participants to leave the existing RIPs. Indeed, when then-Governor Freudenthal "reluctantly" signed Wyoming onto the Platte River RIP in 2006, he wrote that he took comfort in knowing that, "if at any time the Program progresses in a direction counter to the best interests of Wyoming, I can push away from the table and take a different course."

The RIPs have become an established means of ESA compliance in the context of western river basins—one which western states and water users have come to support. But even this collaborative model requires agreement on certain principles: conserving endangered species is a legitimate mandate of federal law; government has a major role to play in meeting that mandate; restoring species is a goal worthy of substantial investment of public funds; and recovering species while protecting water users will require sustained engagement, patience, and compromise from all parties. Continued acceptance of these principles among states and elected officials may lead to new RIPs for river-dependent species in the West. But if these principles are increasingly challenged, support for the programs may begin to erode, causing even longtime participants to question their commitment. It is not difficult to imagine the collapse of one or more existing programs, particularly if federal funding is interrupted or reduced.

Despite these significant threats, RIPs seem likely to survive—and perhaps even expand their range—in the western river systems to which they are endemic. The longevity of the Upper Colorado and San Juan RIPs indicates that, once established, these programs have staying power. And there is reason to believe that new programs will continue to be established: the last decade has not only seen the consummation of the Platte RIP and the birth of a brand-new program for the Middle Rio Grande, but also the creation of the Edwards Aquifer RIP³⁹⁷ and the Missouri River Recovery

^{394.} See supra notes 188–196 and accompanying text. A local Tea Party group organized in opposition to the KBRA and managed to defeat the local elected officials who supported the deal. One of the new officials, elected with Tea Party backing, says that the KBRA is "not going to go anywhere at all" and is "dying on the vine." William Yardley, Tea Party Blocks Pact to Restore a West Coast River, N.Y. TIMES, July 19, 2012, at A16.

^{395.} Indeed, Klamath County, Oregon voted in 2013 to withdraw from the KBRA. Klamath County Officials Vote to Drop Out of the Klamath Basin Restoration Agreement, OREGONLIVE.COM, Feb. 27, 2013, http://www.oregonlive.com/environment/index.ssf/2013/02/klamath_county_officials_vote.html.

^{396.} Press Release, Governor Dave Freudenthal, Governor Signs On to Platte River Agreement (Nov. 27, 2006), *available at* http://www.ridenbaugh.com/nwrd/sub/0701%20nwrd.pdf. 397. *See supra* notes 20–22 and 208 and accompanying text.

Implementation Committee.³⁹⁸ In addition, other river basins have seen their ESA-water conflicts give way to multi-party negotiations, which have produced broad agreements for the Klamath Basin³⁹⁹ and the RIP-like MSCP for the Lower Colorado.⁴⁰⁰ So long as the ESA remains a major concern for western water managers and users, they will seek practical options that provide compliance while minimizing uncertainty and avoiding litigation, and the RIPs have shown that they can do the job.

CONCLUSION

Recovery Implementation Programs have become an established, alternative approach to ESA compliance in the context of western river systems with major federal water projects. If the RIPs are judged solely on their ability to achieve recovery of listed species, the jury is still out—and may stay out for decades longer. In many respects, however, these programs may be deemed a success. Western states and water users, especially, have gained meaningful seats at the table, giving them an ability to control their destiny and gain a level of certainty that is unique in the section 7 context. These programs also represent a credible effort to address Congress' directive for federal agencies to cooperate with state and local entities on water resource issues, consistent with conservation of listed species.

Because of the membership and decision rules of their implementation committees, the RIPs could fairly be seen as emphasizing cooperation over conservation, and thus failing to make recovery "the highest of priorities." But the ESA does not command federal agencies to choose the best course of action for listed species, only to avoid jeopardizing their continued existence—and the courts give the FWS significant discretion in how that is done. The RIPs have allowed water project operations and other federal actions to gain predictable section 7 compliance with relatively little controversy, reliable funding, and no litigation. In the high-stakes game of western water, these programs have allowed the USBR and project water users to avoid jeopardy, without the questions.

^{398.} See supra notes 19 and 209 and accompanying text.

^{399.} See supra notes 189-196 and accompanying text.

^{400.} The Lower Colorado MSCP is not a RIP because it does not focus on recovery, but its origins, participation, conservation measures, and approach to ESA compliance are all similar to those found in the established RIPs. See supra notes 200–207 and accompanying text.

^{401.} See Brower et al., supra note 355, at 1006 (calling the Upper Colorado RIP "a failing recovery program based on a successful consensus-based bureaucracy").