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ARTICLE

NEW ADVENTURES OF THE OLD BUREAU: MODERN-DAY RECLAMATION STATUTES AND CONGRESS'S UNFINISHED ENVIRONMENTAL BUSINESS

REED D. BENSON*

Congress established the reclamation program in 1902, and the hundreds of federal water projects built in the twentieth century helped shape the West. Today, the Bureau of Reclamation plays an enormously important role in managing these projects. But with no new big dams to build, the Bureau has been forced to revise its mission to address today's water management challenges, such as stretching finite water supplies and restoring aquatic ecosystems. Through both site-specific enactments and programmatic statutes, Congress in recent years has given the Bureau new authority and direction to address these modern challenges. But Congress has left a significant gap in the Bureau's statutory powers by failing to provide general authority for restoration of ecosystems impaired by reclamation projects. This Article reviews Congress's expressed priorities for the reclamation program since 2002, identifies programmatic statutes intended to help the Bureau address the water issues of today's West, examines the absence of general environmental restoration authority, and concludes with options for legislation through which Congress might provide such authority.

I. INTRODUCTION

The U.S. Bureau of Reclamation plays an enormously important role in managing water resources in the West.¹ Pursuant to authority granted by the Reclamation Act of 1902² and many subsequent statutes,³ the Bureau was a prolific dam builder through much of the twentieth century.⁴ The major dam

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¹ The term "the West" as used in this Article refers to the seventeen reclamation states in which the Bureau operates: six Great Plains states (North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas), the eight Intermountain West states (Montana, Idaho, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico), and the three West Coast states (California, Oregon, and Washington). See 43 U.S.C. § 391 (2006).

² Act of June 17, 1902, Pub. L. No. 57-161, 32 Stat. 388 (codified in scattered sections of 43 U.S.C. from §§ 371 to 498 (2006)).

³ See *infra* notes 129–137 and accompanying text (providing examples of statutes revising the reclamation program).

⁴ "[O]f Reclamation's more than 180 projects, about 70 were authorized before World War II. The remainder were authorized during and after World War II in small and major

construction era ended decades ago,⁵ but by then the Bureau had built over 600 dams, which today provide public water supply for over thirty million people, generate enough hydropower to serve 3.5 million homes, and deliver water for one-fifth of the West's irrigated farms.⁶

The Bureau today operates in a West that is very different than it was in 1902: far more populous and urban, more economically diversified, and more interested in environmental issues and recreational amenities.⁷ In statutes enacted since the reclamation program's centennial in 2002, Congress has given the Bureau site-specific authorization and direction to deal with modern problems such as public water supply, water conservation, and environmental restoration.⁸ And in other enactments over the past twenty years, Congress has enhanced the Bureau's programmatic authorities in various areas, including water reuse and recycling projects, rural water supply development, and even climate change adaptation.⁹

The Bureau currently states that its mission is "to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public."¹⁰ Those who associate the Bureau with the environmental degradation caused by its construction and operation of hundreds of dams¹¹ might be surprised to see this official emphasis on environmentally sound practices. However, this new mission statement reflects the demands of the modern West, where the Bureau is constantly confronted with major environmental concerns. Still, while Congress has recognized the importance of these issues for the Bureau, it has not yet provided general authority to address environmental problems associated with reclamation projects. Until Congress fills this significant statutory gap, the Bureau will lack the tools needed to resolve some of its most common and pressing issues.

authorizations" BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, A BRIEF HISTORY OF THE BUREAU OF RECLAMATION 4 (2000) [hereinafter BRIEF HISTORY].

⁵ "The last really big project construction authorization occurred in 1968 when Congress approved the Colorado River Basin Project Act which included the Central Arizona Project, the Dolores Project, the Animas-La Plata Project, the Central Utah Project, and several other projects." *Id.* Historian Donald Pisani has written that the Bureau's dam-building era ended in the 1970s, and offered several reasons why the end came. See 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, 625 (2008), available at http://www.usbr.gov/history/Symposium_2008/Historical_Essays.pdf.

⁶ *About Us*, BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, <http://www.usbr.gov/main/about> (last visited Oct. 28, 2010). The number of dams exceeds the number of projects because many projects include more than one dam.

⁷ See generally WESTERN WATER POLICY REVIEW ADVISORY COMM'N, WATER IN THE WEST: THE CHALLENGE FOR THE NEXT CENTURY (1998) (describing economic, demographic, and other changes in the West affecting water resources).

⁸ See *infra* Part III.

⁹ See *infra* Part IV.

¹⁰ *Mission Statement*, BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, <http://www.usbr.gov/main/about/mission.html> (last visited Oct. 28, 2010).

¹¹ See *infra* notes 24–28 and accompanying text.

This Article examines two different types of statutes granting authority to the Bureau: programmatic statutes and site-specific statutes, both of which are common features of reclamation law. A programmatic statute authorizes and directs an agency to carry out a generally applicable program. The 1902 Reclamation Act, which authorized the Secretary of the Interior “to locate and construct, as herein provided, irrigation works for the storage, diversion, and development of waters” throughout the Western states, is an archetypal programmatic statute.¹² A site-specific statute, by contrast, authorizes an agency to take a certain type of action in a specified location. For example, the 1928 Boulder Canyon Project Act authorized the Secretary of the Interior to build a project at a particular location on the Colorado River for specified purposes.¹³ Thus, a programmatic statute reflects Congress’s choice to address an issue everywhere it arises, through delegation of general authority to an agency, while a site-specific statute tasks the agency to deal with an issue only in a single place or instance.

Part II of this Article deals briefly with the Bureau of Reclamation’s changing mission since the end of the dam construction era. Part III reviews Congress’s expressed priorities for the Bureau in the second century of the reclamation program, summarizing site-specific enactments since 2002. Part IV examines relevant programmatic statutes, primarily those enacted since 1990 that authorize the Bureau to address the water resource problems of the modern West. Part V considers the absence of programmatic authority for the Bureau to address environmental problems associated with reclamation projects and concludes with some suggestions for an appropriate authorizing statute.

This Article focuses more on the development of reclamation law over time than on its current status, so most citations are to individual acts of Congress rather than to the U.S. Code. In addressing reclamation statutes, the Article relies almost entirely on statutory text, with only a few references to committee reports or other legislative history—not out of any slavish devotion to the views of Justice Scalia,¹⁴ but rather because the text itself provides an adequate basis for the Article’s major points about reclamation law. Finally, the Article concerns mainly the growth and development of reclamation law rather than its implementation. Thus, the Article focuses on the

¹² Act of June 17, 1902, Pub. L. No. 57-161, 32 Stat. 388 (codified in scattered sections of 43 U.S.C. from §§ 371 to 498 (2006)).

¹³ 1928 Boulder Canyon Project Act, Pub. L. No. 70-642, 45 Stat. 1057 (codified at 43 U.S.C. § 617 (2006)) (authorizing project for purposes of flood control, navigation and flow regulation on the Colorado River, water storage and delivery for reclamation of public lands, electricity generation, and other beneficial uses). This statute also addressed the division and allocation of waters within the Lower Basin of the Colorado River, but even these provisions were specific to that geographic area. The Supreme Court famously interpreted these provisions in *Arizona v. California*, 373 U.S. 546 (1963).

¹⁴ Justice Antonin Scalia has long been a critic of using legislative history to interpret statutes. *See, e.g.*, *Conroy v. Aniskoff*, 507 U.S. 511, 518 (1993) (Scalia, J., concurring) (stating reasons why courts should not rely on legislative history).

actions of Congress granting authority to the Bureau and not on the Bureau's subsequent use of this authority. Ultimately, the Article seeks to describe and evaluate the statutory tools with which Congress has equipped the Bureau.

II. THE BUREAU OF RECLAMATION: A CHANGING MISSION IN THE POST-CONSTRUCTION ERA

One of the Bureau's recent policy statements begins with the following declaration:

The Bureau of Reclamation's history of accomplishment includes marvels of engineering and construction which supply critical water and power to the now-vibrant Western United States. While these Reclamation structures stand as icons of rock-solid stability and constancy, the agency itself has, from its inception, experienced constant change.

It is time for Reclamation to change again.¹⁵

This introductory statement raises three important points about the Bureau. First, the Bureau has always been known primarily for the dams and other public works that it has constructed.¹⁶ Second, building these iconic structures is the centerpiece of the Bureau's "history of accomplishment," not its current mission. Third, the Bureau understands the need to adapt to the post-construction era; with no new big projects to build, the Bureau must find alternative roles to play in the now-vibrant West. It is the way in which Congress has empowered (or failed to empower) the Bureau to fill these alternative roles that is the focus of this Article.

The Secretary of the Interior was first authorized to establish the United States Reclamation Service (as the Bureau was originally called)¹⁷ by the Reclamation Act of 1902, but the statute allowed solely for irrigation projects.¹⁸ With this limited mandate, the Reclamation Service got off to a

¹⁵ BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, MANAGING FOR EXCELLENCE: AN ACTION PLAN FOR THE 21ST CENTURY BUREAU OF RECLAMATION (2006), available at <http://www.usbr.gov/excellence/merweb.pdf>. The *Managing for Excellence* action plan calls for changes to the Bureau's internal management focusing on how the agency will organize itself, address various kinds of challenges, and relate to constituents. See generally *id.*

¹⁶ The Bureau acknowledges this fact, as indicated by the first words on the "About Us" page of its website: "Established in 1902, the Bureau of Reclamation is best known for the dams, powerplants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West." *About Us*, *supra* note 6.

¹⁷ The U.S. Reclamation Service was established in 1902 as part of the U.S. Geological Survey, and then became a separate agency within the Interior Department in 1907. BRIEF HISTORY, *supra* note 4, at 3-4.

¹⁸ See *infra* notes 123-128 and accompanying text.

rather slow start.¹⁹ The pace of construction then picked up in the 1930s,²⁰ in part because the reclamation program expanded to serve new purposes. As stated by historian Donald Pisani, “Not until the 1930s, when the ‘High Dam Era’ gave the [B]ureau responsibilities for providing water to cities as well as farms, did it become the most important federal agency in the West. From 1930 to 1970 the water and power provided by the [B]ureau transformed the region”²¹ Today reclamation projects continue to benefit the region in various ways: in addition to water supply and hydropower mentioned at the outset, Bureau projects host ninety million recreational visitor-days annually,²² and they also provide a measure of flood control.²³

The construction and operation of reclamation projects has also had serious environmental consequences. Most obviously, Bureau dams have wiped out many unique places across the West.²⁴ Dams have also seriously damaged downstream rivers and aquatic ecosystems by altering natural flows and temperatures, depriving streambeds and banks of needed sediment, and eliminating habitats favorable to native species.²⁵ A 1996 study of

¹⁹ “By the time Theodore Roosevelt left office in 1909, two dozen projects had been launched, at least one in every [Western] state and territory, but none had been completed.” Pisani, *supra* note 5, at 611.

²⁰ “Within its first thirty years, [the Bureau] had built about three dozen projects. During the next thirty years, it built nineteen dozen more.” MARC REISNER, *CADILLAC DESERT* 165 (rev. ed., Penguin Books 1993) (1986).

²¹ Pisani, *supra* note 5, at 611.

²² *Facts and Information*, BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, <http://www.usbr.gov/main/about/fact.html> (last visited Oct. 28, 2010).

²³ The Bureau has estimated that reclamation projects had prevented over \$8.3 billion in flood damage from 1950 through 1992. BRIEF HISTORY, *supra* note 4, at 9.

²⁴ In the words of Dr. MacDonnell:

In little over 100 years, this waterscape of the arid West has been transformed as completely and inalterably as the landscape. Accounts of the almost jungle-like delta at the mouth of the Colorado River, the vast marshes and wetlands of places like Tulare Lake in the south Central Valley of California, and Lake Winnemucca and the Lahontan wetlands in the Great Basin of Nevada read like fairy tales—did these places actually exist? The more recently inundated natural wonders like Celilo Falls on the Columbia River and Glen Canyon on the Colorado River have also become mythical places of the past.

Lawrence J. MacDonnell, *Managing Reclamation Facilities for Ecosystem Benefits*, 67 U. COLO. L. REV. 197, 198-99 (1996).

²⁵ *Id.* at 199. A 1997 scientific report to the Western Water Policy Review Advisory Commission summarized these aquatic impacts as follows:

Natural variations in flow were entirely replaced by patterns dictated by downstream water demands Increased sedimentation upstream was reversed below dams, where rivers were sediment starved since particles were trapped in reservoirs. Channels entrenched as a result, lowering water tables that increased downstream intermittency and desiccation even more. Where surface water persisted, streams formerly passing through braided channels began to flow rapidly through sluiceways over bare gravel and sand, distantly bounded by cutbanks [sic] and quickly cooled and heated due to exposure, lower water volumes, and reduced groundwater exchange.

Native fishes were devastated. As rivers were beheaded by dams and natural variation in flow disappeared, so did the resilient species and biological communities

counties in the western United States “found that the number of [Endangered Species Act]-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.”²⁶ Concerns over such impacts raised environmental opposition to new dams, which in turn contributed to the end of the Bureau’s construction era.²⁷ When the Sierra Club and its allies succeeded in keeping new dams out of Dinosaur National Monument and the Grand Canyon, it was clear that times had changed.²⁸

The Bureau has long understood the need to become an agency that can deliver benefits and resolve water resource problems by means other than building new projects. As far back as the Reagan administration, the Bureau acknowledged that its primary role as the builder of large agricultural water projects was “drawing to a close,” and that it “must change from an agency based on federally supported construction to one based on resource management.”²⁹ The Bureau has more recently referred to itself as “a contemporary water management agency . . . [geared toward] meeting the increasing water demands of the West while protecting the environment” and emphasizing “water conservation, water recycling and reuse,” among other things.³⁰ The Bureau today continues to emphasize service in multiple areas, including promoting the development and efficient use of water resources, “[p]rotecting the public and the environment through the adequate maintenance and appropriate operation” of its facilities, and managing its projects

adapted to these inherently transient systems. Streams became inhospitable both above and below high dams. Hydroelectric generators killed fish moving downstream; tailwaters are too cold for warm-adapted species to reproduce. Loss of current or substrate types eliminated those requiring riffles. Reservoirs filled with non-native predators reduced survival of young. Channels directly flooded by reservoirs support few if any native fishes in systems west of the Continental Divide.

W.L. Minckley et al., *Sustainability of Western Native Fish Resources*, in AQUATIC ECOSYSTEMS SYMPOSIUM: REPORT TO THE WESTERN WATER POLICY REVIEW ADVISORY COMMISSION 67-68 (W.L. Minckley ed., 1997), available at <http://repository.unm.edu/bitstream/handle/1928/2784/AQUA%20Pt.4.pdf?sequence=1>.

²⁶ Michael R. Moore et al., *Water Allocation in the American West: Endangered Fish Versus Irrigated Agriculture*, 36 NAT. RESOURCES J. 319, 348 (1996).

²⁷ Pisani, *supra* note 5, at 622 (explaining environmental opposition to dams), 625 (identifying environmental damage as one of several reasons why dam building ended).

²⁸ See JOHN MCPHEE, ENCOUNTERS WITH THE ARCHDRUID, 161-67 (Noonday Press 1990) (1971). “Conservationists say the Dinosaur victory was the birth of the modern conservation movement—the turning point at which conservation became something more than contour plowing.” *Id.* at 165.

²⁹ 2 WATERS & WATER RIGHTS § 41.02 (Robert E. Beck & Amy K. Kelley eds., 3d ed., LexisNexis/Matthew Bender 2009) (quoting BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, ASSESSMENT ’87: A NEW DIRECTION FOR THE BUREAU OF RECLAMATION 1 (1987)).

³⁰ Pisani, *supra* note 5, at 631 (quoting the “What We Do” page of the Bureau’s website on an unspecified date. That language no longer appears on the Bureau’s website.).

“to fulfill water user contracts and protect and/or enhance conditions for fish, wildlife, land, and cultural resources.”³¹

The foregoing statements indicate that environmental concerns are one of the Bureau’s major priorities.³² Some may wonder if the Bureau is merely serving up politically appealing buzzwords, as suggested by the quotable historian Patricia Limerick: “I suppose one could say that we could and should see the Bureau of Reclamation’s rhetorical streak of born-again environmentalism as proof that ‘even the Devil can quote Scripture’”³³ But there can be no doubt that the Bureau has been beset with environmental challenges across the West, and has been forced to take them seriously. In its 2011 Budget Request, the Bureau asked for nearly \$350 million (roughly one-third of the Agency’s overall budget) for endangered species programs and other environmental efforts in several river basins.³⁴ The Bureau simply does not have the luxury to ignore environmental matters, and increasingly must give them as much attention as traditional water deliveries.³⁵

³¹ The Bureau’s website currently contains a “Vision Statement,” and these items are the first three of seven listed goals. *Vision Statement*, BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, <http://www.usbr.gov/main/about/mission.html> (last visited Oct. 28, 2010).

³² The Bureau’s environmental conversion can be attributed to many factors, largely external to the Agency. The Bureau’s own history identifies multiple reasons why environmental concerns became increasingly important to the Bureau in the latter half of the twentieth century. These reasons include public opinion opposing new dams, greater public awareness of environmental and natural resource issues, changed public attitudes toward nature, a fuller understanding of the impacts caused by reclamation projects, and a host of new laws enacted by Congress. BRIEF HISTORY, *supra* note 4, at 7–8.

³³ Patricia Nelson Limerick, *One Hundred Years of the Bureau of Reclamation: Looking from the Outside In*, in THE BUREAU OF RECLAMATION: HISTORY ESSAYS FROM THE CENTENNIAL SYMPOSIUM VOLUMES I AND II 651 (2008), available at http://www.usbr.gov/history/Symposium_2008/Historical_Essays.pdf. Limerick goes on to say, however, “[a]nd yet the change in the Bureau’s operations has been as enormous as the change in its official rhetoric.” *Id.*

³⁴ Most of this money involves California Central Valley and Bay-Delta efforts, but the request also included \$16.5 million for the Lower Colorado endangered species program, \$12.7 for the Platte River endangered species program, \$22.5 million for (mostly) environmental purposes on the Klamath Project, and \$25.1 million for the Middle Rio Grande Project, “of which a significant portion is to support environmental activities developed through the ESA Collaborative Program.” Press Release, Bureau of Reclamation, U.S. Dep’t of the Interior, Reclamation’s FY 2011 Budget Request is \$1.1 Billion (Feb. 1, 2010), available at <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=31461>.

³⁵ Consider this summary of the Bureau’s priorities, presented by Commissioner of Reclamation Michael Connor in his congressional testimony on the Bureau’s 2010 Budget Request:

Reclamation’s FY 2010 priority goals are directly related to fulfilling contractual requests to deliver water and power. These include addressing a range of other water supply needs in the West, playing a significant role in restoring and protecting freshwater ecosystems consistent with applicable State and Federal law, and enhancing management of our water infrastructure while mitigating for any harmful environmental effects. Reclamation will deliver roughly 28 million acre-feet of water to meet contractual obligations while addressing other resource needs (for example, fish and wildlife habitat, environmental enhancement, recreation, and Native American trust responsibilities).

President’s Fiscal Year 2010 Budget Request for the Bureau of Reclamation: Hearing Before the Subcomm. on Energy and Water Dev. of the S. Comm. on Appropriations, 111th Cong. 7

The Bureau's mission and priorities have changed significantly over the past forty years, shifting away from building dams to managing existing projects, stretching the West's increasingly scarce water supplies, and addressing environmental concerns. The remainder of this Article focuses on the role of Congress in redirecting the Bureau to address the needs of the modern West, beginning in the next Part with an evaluation of recent site-specific enactments.

III. CONGRESS'S PRIORITIES FOR THE BUREAU AS SHOWN BY RECENT SITE-SPECIFIC STATUTES

Since the 2002 centennial of the reclamation program, Congress has authorized or directed the Bureau to take dozens of site-specific actions. Many of these site-specific provisions are included in various authorizing statutes; others appear in appropriations bills, either as spending measures or as substantive "riders."³⁶ Taken as a whole, these numerous site-specific provisions represent a very practical expression of congressional priorities for the reclamation program in its second century.

This Part addresses site-specific statutes in some detail, for two reasons. First, because these enactments make up the great majority of recent congressional actions regarding the Bureau, describing them is necessary to provide a complete picture of changes and trends in modern reclamation law. Second, these statutes reflect some of the greatest water challenges facing the West today, and they indicate which of these challenges Congress has chosen to address through legislation involving the Bureau. Later Parts of this Article will examine Congress's choices regarding *programmatic* authority for the Bureau to handle these same challenges.

A review of these site-specific provisions shows that Congress's priorities for the Bureau since 2002 fall into five general categories: (1) water reuse and recycling projects, which facilitate reuse of (usually municipal) wastewater after treatment; (2) rural water supply projects, which provide public domestic water supplies to small communities; (3) traditional water development projects (or studies thereof), which manage and deliver water for various purposes; (4) water conservation activities, which promote more efficient use of water for irrigation or other uses; and (5) projects or programs to benefit fish, wildlife, and/or environmental quality, often by protecting or restoring aquatic or riparian habitats.

Congress also expressed these priorities in the context of a major piece of national legislation, the American Recovery and Reinvestment Act of

(2009) (statement of Comm'r Michael L. Connor), *available at* <http://appropriations.senate.gov/ht-energy.cfm>.

³⁶ According to the U.S. Senate's online glossary of legislative terms, "rider" means "a nongermane amendment to a bill or an amendment to an appropriation bill that changes the permanent law governing a program funded by the bill." *Glossary*, U.S. SENATE, http://www.senate.gov/reference/glossary_term/rider.htm (last visited Nov. 11, 2010).

2009 (the “Stimulus Bill”),³⁷ enacted early in President Obama’s term. The Stimulus Bill appropriated an additional \$1 billion for the Bureau’s “Water and Related Resources” activities,³⁸ indicating that Congress (not surprisingly) values Bureau activities for the jobs they create as well as for the water-related benefits they provide.³⁹ But Congress also indicated its larger goals for the Bureau in directing that some of the money be spent on certain programs: at least \$126 million for water reuse and recycling projects, at least \$60 million for rural water projects, \$50 million toward completing the more traditional Central Utah Project, and \$50 million for activities under the California Bay-Delta Restoration Act (a multi-purpose effort with an environmental emphasis, as explained in the next paragraph).⁴⁰

Discussing the new statutory priorities noted above requires three caveats. First, since 2002, Congress has enacted several provisions regarding the Bureau that fall outside the five categories delineated above. For example, several provisions address contractual or ownership arrangements at existing projects,⁴¹ while others involve settlement of tribal water rights claims.⁴² Second, this review takes Congress’s description of its actions at face value. For example, if a statute purports to authorize a “water conservation” project, that purpose is accepted as true and accurate even though the project might well be characterized as something else.⁴³ Third, certain provisions do

³⁷ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (codified in scattered sections of U.S.C. (Supp. III 2009)).

³⁸ Tit. 4, 123 Stat. at 137.

³⁹ The bill’s title reads, “An Act Making supplemental appropriations for job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, and State and local fiscal stabilization . . .” 123 Stat. at 115.

⁴⁰ Tit. 4, 123 Stat. at 137. The appropriation for the Bureau contained only one other earmark, requiring no less than \$10 million for “a bureau-wide inspection of canals program in urbanized areas.” *Id.* Congress ultimately gave the Bureau great discretion in spending the \$1 billion, though, earmarking less than \$300 million for five specified purposes and providing unlimited authority to reprogram the funds. *Id.*

⁴¹ *See, e.g.*, Consolidated Natural Resources Act of 2008, Pub. L. No. 110-229, § 503, 122 Stat. 754, 831 (codified at 16 U.S.C. § 1244 (2006)) (transferring title to the American River Pump Station to the Placer County Water Agency); Energy and Water Development Appropriations Act of 2004, Pub. L. No. 108-137, § 204, 117 Stat. 1827, 1849 (codified at 43 U.S.C. § 2241 (2006)) (directing the Secretary of the Interior to delete a certain provision in two contracts for water supply from the Central Valley Project).

⁴² *See, e.g.*, Omnibus Public Land Management Act of 2009, Northwestern New Mexico Rural Water Projects Act, Pub. L. No. 111-11, § 10501, 123 Stat. 991, 1375 (codified in scattered sections of 43 U.S.C. (Supp. III 2009)) (establishing a Reclamation Water Settlements Fund to provide money for tribal water settlements, prioritizing certain New Mexico settlements); Energy and Water Development Appropriations Act of 2004 § 216 (authorizing the Secretary of the Interior to take certain actions regarding the Bureau’s Central Arizona Project “[i]n order to facilitate Indian water rights settlements in the State of Arizona”).

⁴³ Congress has sometimes appeared to authorize a project for one set of purposes, but then justified that project based on other purposes. *See* United States v. Gerlach Live Stock Co., 339 U.S. 725 (1950) (determining that the Central Valley Project was essentially a reclamation project despite stated congressional purposes of navigation and river regulation); Arizona v. California, 283 U.S. 423 (1931) (rejecting the argument that the Hoover Dam was a storage project that would actually hinder navigation due to Congress’s stated navigation purpose for the project).

not fit cleanly within a single category; several seem to belong in multiple categories. The Calfed Bay-Delta Program, in particular, which includes “components relating to water storage, ecosystem restoration, water supply reliability (including new firm yield), conveyance, water use efficiency, water quality, water transfers, watersheds, [and] the Environmental Water Account,”⁴⁴ seems to fit at least three categories. Nonetheless, the record generally shows that Congress has prioritized these five areas in recent legislation concerning the Bureau, and the remainder of this Part examines the relevant statutes passed since 2002.

A. *Water Reuse/Recycling Projects*

Congress has supported projects to clean up and reuse wastewater since it passed the Reclamation Wastewater and Groundwater Study and Facilities Act, which was enacted as Title XVI of the Reclamation Projects Authorization and Adjustment Act of 1992.⁴⁵ This statute directed the Bureau to investigate opportunities to reclaim and reuse wastewater, and to design and build wastewater reclamation and reuse facilities.⁴⁶ The 1992 statute not only established this new program, it also identified the first batch of water recycling/reuse projects for the Bureau to pursue under its new authority.⁴⁷

Congress has continued to show great enthusiasm for these projects, and since 2002 has directed the Bureau to work on more than twenty of them.⁴⁸ California has enjoyed a boom in such “Title XVI” project authorizations in the last two years, with multiple projects identified in three differ-

⁴⁴ Water Supply, Reliability, and Environmental Improvement Act, Calfed Bay-Delta Authorization Act, Pub. L. No. 108-361, § 103, 118 Stat. 1681, 1683 (2004) (approving the 2000 Record of Decision as a general framework for the Calfed Bay-Delta Program. Other components of the program include levee stability, governance, and science.).

⁴⁵ Reclamation Projects Authorization and Adjustment Act of 1992, Pub. L. No. 102-575, tit. XVI, 106 Stat. 4600, 4663 (codified as amended at 43 U.S.C. § 390h (2006)).

⁴⁶ § 1602, 106 Stat. at 4664.

⁴⁷ §§ 1606-1614, 106 Stat. at 5665-68 (directing the Bureau to work on several feasibility studies and demonstration projects).

⁴⁸ See *infra* notes 49-51 and accompanying text.

ent statutes;⁴⁹ however not all of the recent authorizations have involved California.⁵⁰

Two numbers rather dramatically demonstrate Congress's love affair with these water recycling and reuse projects. The first is fifty-three, the total number of projects listed in statutes under the Title XVI program as of August 2009.⁵¹ The second is 126,000,000, the minimum number of dollars directed to these projects in the 2009 Stimulus Bill⁵²—more than double the amount allocated toward any other goal of the reclamation program.

B. Rural Water Supply Projects

The second-largest reclamation item in the Stimulus Bill was rural water supply projects, to which Congress allocated \$60 million of the Bureau's total \$1 billion budget.⁵³ A rural water supply project is defined as one that provides domestic, industrial, municipal, or residential water to one or more communities no larger than 50,000 people, which may include an Indian tribe or tribal entity.⁵⁴ Since 2002, various statutes have authorized work on a number of rural water projects primarily located in New Mexico and primarily involving Indian tribes.

⁴⁹ Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, §§ 9104-9114, 123 Stat. 991, 1303, 1315-20 (codified in scattered sections of 43 U.S.C. § 390h (Supp. III 2009)); § 9104, 123 Stat. at 1303 (Rancho California); § 9109, 123 Stat. at 1315 (Elsinore Valley); § 9110, 123 Stat. at 1315 (North Bay); § 9111, 123 Stat. at 1317-18 (Prado Basin and Lower Chino Dairy); § 9113, 123 Stat. at 1319-1320 (Oxnard); § 9114, 123 Stat. at 1320 (Yucaipa Valley and City of Corona); Consolidated Natural Resources Act of 2008, Pub. L. No. 110-229, § 511, 122 Stat. 754, 840 (codified at 43 U.S.C. § 390h-24 (Supp. II 2008)) (Eastern Municipal Water District Project); § 512, 122 Stat. at 841-43 (seven different projects under the heading "Bay Area Regional Water Recycling Program"); Consolidated Appropriations Act, Pub. L. No. 110-161, § 210, 121 Stat. 1844, 1954 (2007) (codified at 43 U.S.C. § 390h-21 (Supp. I 2007)) (Inland Empire and Cucamonga Valley); § 214, 121 Stat. at 1955-56 (Mojave Water Agency plan).

⁵⁰ The Bureau was authorized to participate in the design, planning, and construction of the North Las Vegas Water Reuse Project. Consolidated Appropriations Resolution of 2003, Energy and Water Development Appropriations of 2003, Pub. L. No. 108-7, § 211, 117 Stat. 11, 146 (codified at 42 U.S.C. § 10301 (2006)). They were also authorized to participate in a project in Williamson County, Texas. Williamson County Water Recycling Act of 2004, Pub. L. No. 108-316, 118 Stat. 1202 (codified at 43 U.S.C. § 390h-17a (2006)). Additionally, Congress authorized Bureau involvement in three different Hawaiian projects. Hawaii Water Resources Act of 2005, Pub. L. No. 109-70, 119 Stat. 2009 (codified in scattered sections of 43 U.S.C. § 390h (2006)).

⁵¹ This number includes two demonstration projects listed in 43 U.S.C. § 390h-3 (Supp. III 2009), and a total of fifty-one projects listed in §§ 390h-4 to 390h-39. Several projects were added between 1992 and 2002. *See, e.g.*, Reclamation Recycling and Water Conservation Act of 1996, Pub. L. No. 104-266, 110 Stat. 3290 (codified in scattered sections of 43 U.S.C. § 390h (2006)) (adding sixteen projects).

⁵² *See supra* note 40 and accompanying text.

⁵³ *See supra* note 40 and accompanying text.

⁵⁴ Congress adopted this definition in the Reclamation Rural Water Supply Act of 2006, Pub. L. No. 109-451, § 102(9)(A), 120 Stat. 3345, 3346-47 (codified at 43 U.S.C. § 2401 (2006)). This statute is discussed *infra* at Parts III.B and III.C.

Rural water systems for two Indian reservations, the Jicarilla Apache in New Mexico and the Rocky Boy's in Montana, were authorized in a 2002 statute addressing a variety of issues in Indian country.⁵⁵ The same statute directed the Bureau to perform a feasibility study for a rural water system for Nebraska's Santee Sioux Tribe.⁵⁶ Congress reauthorized that study in 2004,⁵⁷ along with a feasibility study of ways to meet the water supply needs of Washington's Quinault Indian Nation.⁵⁸ Most recently, the 2009 Omnibus Public Land Management Act authorized the Navajo-Gallup Water Supply Project,⁵⁹ primarily benefiting the Navajo Nation, but also providing water for the Jicarilla Apache Tribe.⁶⁰

Congress has acted to benefit several rural communities in New Mexico in addition to the Jicarilla Apache and Navajo Reservations.⁶¹ About one-fifth of the water from the Navajo-Gallup Water Supply Project will go to the City of Gallup, which is located outside of the reservation.⁶² The 2009 Omnibus Public Land Management Act also authorized the Eastern New Mexico Rural Water System Project, designed to deliver water from the existing Ute Reservoir to several communities along the eastern edge of the state.⁶³ Congress acted in 2004 to benefit two other New Mexico communities, Chimayo⁶⁴ and Española.⁶⁵

Although since 2002 Congress has disproportionately benefited a single state in enacting site-specific legislation for rural water supply projects, its most important action in support of these kinds of projects, the Reclamation

⁵⁵ Indian Financing Amendments Act of 2002, Pub. L. No. 107-331, 116 Stat. 2834 (codified at 25 U.S.C. § 1779 (2006)). § 801, 116 Stat. at 2855, authorized the Jicarilla Apache Reservation Rural Water System Act, and § 901, 116 Stat. at 2859, authorized the Rocky Boy's/North Central Montana Regional Water System. The latter authorized a rural water system for the Rocky Boy's Reservation, in conjunction with a "noncore system" for certain rural areas in North Central Montana outside the reservation. § 905, 116 Stat. at 2864. A February 2003 appropriations bill also directed the Bureau to work on "development of the North Central Montana Rural Water Supply System," presumably the same project. Consolidated Appropriations Resolution of 2003, Pub. L. No. 108-7, 117 Stat. 146.

⁵⁶ Indian Financing Amendments Act of 2002 § 1001.

⁵⁷ Native American Technical Corrections Act of 2004, Pub. L. No. 108-204, § 125, 118 Stat. 542, 546 (codified at 25 U.S.C. § 712e (2006)).

⁵⁸ § 124, 118 Stat. at 546.

⁵⁹ Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, §§ 10601-10609, 123 Stat. 991, 1379-96 (codified in scattered sections of 43 U.S.C. (Supp. III 2009)).

⁶⁰ § 10603(b), 123 Stat. at 1383-84 (allocating a total of up to 37,760 acre-feet of project water between the City of Gallup (7,500 acre-feet), the Navajo Nation in New Mexico (up to 22,650 acre-feet), the Navajo Nation in Arizona (6,411 acre-feet), and the Jicarilla Apache Tribe (1,200 acre-feet)).

⁶¹ Some of the water delivered under the Navajo-Gallup Water Supply Project will actually be delivered to Navajo Nation communities in Arizona, rather than in New Mexico. *Id.*

⁶² *Id.*

⁶³ § 9103, 123 Stat. at 1300-03 (cities of Cloves, Elida, Grady, Melrose, Portales, and Texico).

⁶⁴ Chimayo Water Supply System and Española Filtration Facility Act, Pub. L. No. 108-354, 118 Stat. 1400 (2004) (feasibility study for new water system for the town). In addition to the study, the bill authorized federal assistance for emergency water supply development activities, ranging from hauling water to installing pumps and pipes. § 103, 118 Stat. at 1401.

⁶⁵ § 202, 118 Stat. at 1402 (federal assistance for new water filtration facility).

Rural Water Supply Act of 2006,⁶⁶ has had a multi-state impact. This statute established the Bureau's Rural Water Supply Program, discussed *infra* at Part III.C, to operate in all seventeen Western states where the Bureau does business.⁶⁷

C. Water Development Projects and Studies

Given that Congress has not authorized a big new project in decades,⁶⁸ it is somewhat surprising to see how many recent statutes have directed the Bureau to work on a water supply feasibility study or some aspect of a proposed water supply project. Congress has enacted more than twenty such authorizations since 2002, which might suggest that the Bureau is on the verge of another golden era of new project construction. The first decade of the twenty-first century bears little resemblance to the boom era of the 1930s through the 1960s, when the Bureau built dozens of projects to store and deliver significant quantities of water, largely for irrigation (and hydro-power), costing enormous sums of money.⁶⁹ Today's statutes manifest a cautious and incremental approach to the development of new water supply infrastructure. Some of them also reflect a heightened awareness of significant environmental concerns.

Most importantly, the great majority of the authorizations since 2002 are for feasibility studies only. Several of the statutes authorize feasibility studies of a seemingly general and open-ended nature; for example, Congress in 2008 called on the Bureau to determine the feasibility of a project that would "improve water supply reliability" in the Republican River Basin below Harlan County Lake, "increase the capacity of water storage through modifications of existing projects or through new projects," and "improve water management efficiency" in the Republican basin.⁷⁰ Other statutes are somewhat more specific, indicating, or at least suggesting, the study of a

⁶⁶ Reclamation Rural Water Supply Act of 2006, Pub. L. No. 109-451, 120 Stat. 3345, 3346-56 (codified in scattered sections of 43 U.S.C. (2006)).

⁶⁷ § 102(8), 120 Stat. at 3346; § 103, 120 Stat. at 3347-48.

⁶⁸ See *supra* notes 5, 27 and accompanying text.

⁶⁹ See REISNER, *supra* note 20, at 145-68 (describing the Bureau's construction boom era in a chapter aptly entitled "The Go-Go Years").

⁷⁰ Consolidated Natural Resources Act of 2008, Pub. L. No. 110-229, 122 Stat. 754, 839 (codified in scattered sections of 16, 42, 43 and 48 U.S.C. (Supp. II 2008)); see also Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, § 9002, 123 Stat. 991, 1295-96 (codified in scattered sections of 43 U.S.C. (Supp. III 2009)) (feasibility study of alternatives to augment water supplies in the Sierra Vista subwatershed in Arizona); Consolidated Natural Resources Act of 2008 § 509(c) ("Water for Irrigation, Streams and the Economy Project water management feasibility study" for Little Butte and Bear Creek subbasins, Oregon); § 516, 122 Stat. at 850 (feasibility study for alternatives to augment the water supplies of the Central Oklahoma Master Conservatory District and cities served by it); Energy and Water Development Appropriations Act 2004, Pub. L. No. 108-137, § 215, 117 Stat. 1827, 1851-52 (codified at 43 U.S.C. § 377b (2006)) (Tualatin River Basin feasibility study to identify ways to meet future water needs, increase water conservation and storage, and improve water and environmental quality).

particular project as one potential answer to a general water supply/demand problem.⁷¹ Several of the statutes direct study of the feasibility of a particular project or projects involving specific water supply facilities and reservoirs.⁷²

A few statutes authorize the Bureau to undertake project design or construction activities, but these projects are not classic Bureau of Reclamation works in the sense that they do not involve large on-channel reservoirs and extensive conveyance and delivery systems to supply irrigation water that cost hundreds of millions of dollars. For example, the recently-authorized Santa Margarita Project in California will primarily benefit the Camp Pendleton Marine Base⁷³ and is relatively inexpensive at \$60 million⁷⁴ (as compared to around \$500 million for the recently completed Animas-La Plata Project in Colorado⁷⁵). The Riverside-Corona Feeder Project is a ground-water project involving twenty wells and related facilities in California's Riverside and San Bernardino Counties; the federal share of project costs is only 25%, up to a limit of \$26 million.⁷⁶ Some of the authorizations do not involve a new project at all, but only rehabilitation of existing infrastructure.⁷⁷ Both of these post-2002 projects depart from the traditional reclamation project model in one or more respects, in that neither involves a large,

⁷¹ See Omnibus Public Land Management Act of 2009 § 9001 ("feasibility studies on projects that address water shortages within the Snake, Boise, and Payette River systems in the State of Idaho, and are considered appropriate for further study" under a report issued by the Bureau in 2006); National Heritage Areas Act of 2006, Pub. L. No. 109-338, § 501, 120 Stat. 1783, 1854-55 (codified at 16 U.S.C. § 461 note (2006)) (the section headed "Authorization of Mokelumne River Regional Water Storage and Conjunctive Use Project Study" directs the Bureau to work with the Mokelumne River Water and Power Authority to study the feasibility of "a project to provide additional water supply and improve water management reliability through the development of new water storage and conjunctive use programs."); Consolidated Appropriations Resolution of 2003, Pub. L. No. 108-7, § 214, 117 Stat. 147 (codified at 43 U.S.C. § 10301 note (2006)) ("feasibility study of options for additional water storage in the Yakima River Basin, Washington, with emphasis on the feasibility of storage of Columbia River water in the potential Black Rock Reservoir").

⁷² See Omnibus Public Land Management Act of 2009 § 9003 (feasibility study of "a four reservoir intertie system" for the City of San Diego and the Sweetwater Authority); Consolidated Natural Resources Act of 2008 § 504 (feasibility study of raising the height of the Arthur V. Watkins Dam, part of Utah's Weber Basin Project); Energy and Water Development Appropriations Act, Pub. L. No. 109-103, § 209, 119 Stat. 2247, 2269 (2005) (codified at 42 U.S.C. § 10301 note (2006)) (updating study of the Auburn-Folsom South Unit of the Central Valley Project, previously authorized in 1965); Water Supply, Reliability, and Environmental Improvement Act, Pub. L. No. 108-361, § 202, 118 Stat. 1681, 1701-02 (2004) (feasibility of constructing a project on Alder Creek in El Dorado County, California); Consolidated Appropriations Resolution of 2003 § 215 (feasibility studies for Sites Reservoir, Los Vaqueros Reservoir Enlargement, and Upper San Joaquin Storage projects in California).

⁷³ Omnibus Public Land Management Act of 2009 § 9108(d) (allocating 60% of the project yield to the Secretary of the Navy and 40% to the Fallbrook Irrigation District).

⁷⁴ § 9108(j), 123 Stat. at 1315.

⁷⁵ See *Animas-La Plata Project—Frequently Asked Questions Page 5*, BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, <http://www.usbr.gov/uc/progact/animas/faq5.html> (last visited Oct. 28, 2010).

⁷⁶ Omnibus Public Land Management Act of 2009 § 9112.

⁷⁷ See, e.g., § 9105, 123 Stat. at 1303-04 (authorizing rehabilitation of Jackson Gulch Canal system in Colorado); § 9106, 123 Stat. at 1304-09 (authorizing rehabilitation of irrigation infrastructure of Indian Pueblos in the Rio Grande Basin of New Mexico); Consolidated Natu-

expensive surface reservoir, storing and releasing water primarily for irrigation.

The 2004 statute authorizing the Calfed Bay-Delta Program⁷⁸ is unique, in that the authorized action involves a wide-ranging program of water-related activities affecting California's Bay-Delta area.⁷⁹ This program operates under a general requirement that its "activities consisting of protecting drinking water quality, restoring ecological health, improving water supply reliability (including additional storage, conveyance, and new firm yield), and protecting Delta levees will progress in a balanced manner."⁸⁰ Despite the program's wide-ranging nature, however, the authorizing statute does not provide for the construction of any major new project. It does, however, authorize feasibility studies for four specific projects.⁸¹

One earlier-authorized project has repeatedly been the subject of legislation since 2002. The Central Utah Project ("CUP")⁸² (which is still being completed) not only received special mention in nearly every appropriations measure involving the Bureau in the last eight years,⁸³ but also a \$50 million earmark in the 2009 Stimulus Bill.⁸⁴ Even as a fairly traditional water-supply project, however, the CUP shows the changes in reclamation law over the past twenty years. Not only will the completed CUP be notably smaller than originally envisioned,⁸⁵ but the 1992 Central Utah Project Completion Act⁸⁶

ral Resources Act of 2008 § 509(b) (authorizing rehabilitation of Wallowa Lake Dam in Oregon).

⁷⁸ Calfed Bay-Delta Authorization Act, Pub. L. No. 108-361, 118 Stat. 1681 (2004).

⁷⁹ The statute approves the 2000 Calfed Bay-Delta Program Record of Decision as a "general framework" for the program, "including its components relating to water storage, ecosystem restoration, water supply reliability (including new firm yield), conveyance, water use efficiency, water quality, water transfers, watersheds, the Environmental Water Account, levee stability, governance, and science." § 103(a)(1), 118 Stat. at 1683.

⁸⁰ § 103(a)(2)(A), 118 Stat. at 1683.

⁸¹ § 103(d)(1)(A), 118 Stat. at 1684 (authorizing feasibility studies of enlargement of Shasta Dam and Los Vaqueros Reservoir, and also studies of the Sites Reservoir and Upper San Joaquin Storage).

⁸² The CUP is perhaps the last big project from the Bureau's boom years, originally authorized in the Colorado River Storage Project Act, along with other major works such as the Glen Canyon, Flaming Gorge, and Navajo Dams. Colorado River Storage Project Act, Pub. L. No. 84-485, 70 Stat. 105 (1956) (codified at 43 U.S.C. § 620 (2006)).

⁸³ See, e.g., Energy and Water Related Activities Appropriations Act, 2008, Pub. L. No. 110-161, div. C, tit. II, 121 Stat. 1884, 1949 (2007) (earmarking \$34.9 million for Bureau activities authorized by the Central Utah Project Completion Act); Energy and Water Appropriations Act, 2006, Pub. L. No. 109-103, tit. II, 119 Stat. 2247, 2264 (2005) (codified at 33 U.S.C. § 2263 (2006)) (\$32.6 million for same purpose); Energy and Water Development Appropriations Act, 2004, Pub. L. No. 108-7, div. D., tit. II, 117 Stat. at 143 (2003) (\$41.4 million for the same purpose).

⁸⁴ See *supra* notes 37-40 and accompanying text.

⁸⁵ As described in a history of the CUP posted on the Bureau's website:

The complete plans for the CUP were among the most ambitious conceived by Reclamation. Complicated by the problematic and sometimes controversial water rights agreement with the Ute Tribe, changing priorities of the State of Utah over development of its share of the Colorado River, geologic problems, and cost increases, three units of the CUP were not built by Reclamation While much smaller than the original project contemplated by Reclamation, the project provides an important sup-

contained extensive provisions for the benefit of fish, wildlife, and recreation,⁸⁷ demonstrating an environmental sensitivity not seen in earlier project authorizations.⁸⁸ These features suggest that in the Bureau's second century, even somewhat traditional projects will not proceed in the traditional way, but instead will provide for protection of environmental and recreational values.⁸⁹

D. Water Conservation Activities

Since 2002, Congress has repeatedly directed or authorized the Bureau to take or support water conservation measures. Not surprisingly, these statutes have focused chiefly on conserving water associated with existing Bureau projects.

Several statutes have addressed water conservation at a particular project or set of projects. For example, the Calfed authorization⁹⁰ regarding the Central Valley Project emphasized several measures to promote water use efficiency.⁹¹ Amendments to the Central Utah Project Completion Act authorized the Bureau to use up to \$300 million of its unexpended CUP budgetary authority for several purposes, including the implementation of water

ply of municipal and supplemental irrigation water while providing valuable environmental enhancements.

Adam R. Eastman, *Central Utah Projects Upalco, Uintah, and Ute Indian (Ultimate Phase) Units*, in BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR 26-27, http://www.usbr.gov/projects//ImageServer?imgName=Doc_1232656886173.pdf (last visited Oct. 26, 2010).

⁸⁶ Central Utah Project Completion Act, Pub. L. No. 102-575, tit. II-VI, 106 Stat. 4600, 4605-55 (1992).

⁸⁷ Tit. III, 106 Stat. at 4625-48; tit. IV, 106 Stat. at 4648-50. Additional provisions addressed longstanding concerns of the Ute Indian Tribe. Tit. V, 106 Stat. at 4650-55. According to a history of the CUP, the CUP Completion Act was a compromise intended to increase the amount of money that could be spent on the project while "addressing longstanding economic and environmental complaints lodged by Reclamation critics." Eastman, *supra* note 85, at 22-23.

⁸⁸ When Congress authorized the Central Arizona Project in 1968—just before the dawn of the era of major environmental legislation—it addressed fish, wildlife, and recreation in a single sentence. Colorado River Basin Project Act, Pub. L. No. 90-537, § 308, 82 Stat. 885, 893 (1968) (codified at 42 U.S.C. § 1527 (2006)) (one sentence devoted to "fish and wildlife resources" and "recreation opportunities" relating to the project, except for certain tribal facilities mentioned in § 302).

⁸⁹ Congress's most recent change to the CUP authorization reinforces this idea. *See* Amendments to the Central Utah Project Completion Act, Pub. L. No. 107-366, § 1(d), 116 Stat. 3030, 3031 (2002) (authorizing use of the Bureau's unexpended CUP budget authority for a range of purposes: "to acquire water and water rights for project purposes including instream flows, to complete project facilities . . . to implement water conservation measures . . . to stabilize high mountain lakes . . . and for other purposes. In addition, funds may be provided by the [Utah Reclamation Mitigation and Conservation] Commission for fish and wildlife purposes.").

⁹⁰ Calfed Bay-Delta Authorization Act, Pub. L. No. 108-361, tit. I, 118 Stat. 1681 (2004).

⁹¹ The statute authorized several kinds of actions under the heading "Water Use Efficiency," including water conservation projects, technical assistance for agricultural and urban water conservation projects, water recycling and desalination projects, and best management practices for urban water conservation. § 103(d)(3), 118 Stat. at 1688.

conservation measures.⁹² Some of these types of authorizations have approved specific water conservation projects, or in the case of one statute, fifteen such projects along the Texas portion of the Rio Grande.⁹³

Congress has also supported Bureau water conservation efforts more broadly through the annual appropriations process. The Energy and Water Development Appropriations Act of 2004 authorized the Bureau to use grants or “agreements with irrigation or water districts to fund up to 50% of the cost of planning, designing, and constructing improvements that will conserve water, increase water use efficiency, or enhance water management through measurement or automation, at existing water supply projects” within the reclamation states.⁹⁴ Continuing authorization for this grant program appeared in several subsequent appropriations bills through FY 2009.⁹⁵

The Bureau’s initiative to promote water conservation received a significant boost in 2009 when Congress enacted the SECURE Water Act.⁹⁶ That statute expanded and permanently authorized the Bureau’s grant program for “water management improvement” projects,⁹⁷ as explained more fully below in Part IV.D.

E. Fish and Wildlife/Endangered Species Conservation Measures

One of the most active areas for Bureau legislation since 2002 has been fish and wildlife conservation, particularly in river systems with water-dependent endangered or threatened species. These enactments mostly fall into two categories: authorization of regional programs to benefit species in particular river basins, and approval of funds for specific conservation projects

⁹² Amendments to the Central Utah Project Completion Act § 1(d). These water conservation measures had previously been authorized under § 207 of the Central Utah Project Completion Act, which sought to “encourage the conservation and wise use of water” to achieve a range of water supply and ecosystem benefits. Central Utah Project Completion Act, Pub. L. No. 102-575, § 207, 106 Stat. 4600, 4616 (1992).

⁹³ Lower Rio Grande Valley Water Resources Conservation and Improvement Act of 2002, Pub. L. No. 107-351, § 2, 116 Stat. 2978, 2978. This statute expanded on the Lower Rio Grande Valley Water Resources Conservation and Improvement Act of 2000, Pub. L. No. 106-576, 114 Stat. 3065, 3067, which had authorized four such projects. The Omnibus Public Land Management Act of 2009 authorized another specific conservation project involving the Tumalo Irrigation District in Oregon. Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, § 9101, 123 Stat. 991, 1298.

⁹⁴ Energy and Water Development Appropriations Act of 2004, Pub. L. No. 108-137, § 212, 117 Stat. 1827, 1851 (2003).

⁹⁵ Energy and Water Development and Related Agencies Appropriations Act, 2009, Pub. L. No. 111-8, div. C, § 205, 123 Stat. 601, 612 (2008); Energy and Water Development and Related Agencies Appropriations Act, 2008, Pub. L. No. 110-161, div. C, § 204, 121 Stat. 1937, 1951 (2007); Energy and Water Development Appropriations Act, 2006, Pub. L. No. 109-103, § 205, 119 Stat. 2247, 2267-68 (2005); Energy and Water Development Appropriations Act, 2005, Pub. L. No. 108-447, § 206, 118 Stat. 2935, 2949 (2004).

⁹⁶ SECURE Water Act, S. 2156, 110th Cong. (2007). The SECURE Water Act was incorporated into and passed as part of the Omnibus Public Land Management Act of 2009 §§ 9501-9510.

⁹⁷ Omnibus Public Land Management Act of 2009 § 9504.

at particular sites. As one might expect, Congress has typically used authorizing statutes to establish the programs and appropriations bills to fund the projects.

Program authorizations have tended to involve basin-wide collaborative efforts involving both federal and state government participants. Some of these programs have involved multiple states, as with the Upper Colorado/San Juan Endangered Fish Recovery Programs⁹⁸ (reauthorized in both 2006⁹⁹ and 2009¹⁰⁰), the Platte River Recovery Implementation Program,¹⁰¹ and the Lower Colorado River Multi-Species Conservation Program.¹⁰² A more localized effort, the Endangered Species Collaborative Program for the Middle Rio Grande in New Mexico, was originally approved under the Energy and Water Development Appropriations Act for 2004,¹⁰³ and reauthorized in appropriations bills for 2008¹⁰⁴ and 2009.¹⁰⁵ California has received two major

⁹⁸ An Act to authorize the Bureau of Reclamation to provide cost sharing for the endangered fish recovery implementation programs for the Upper Colorado and San Juan River Basins, Pub. L. No. 106-392, 114 Stat. 1602 (2000). The purpose of the statute was “to authorize and provide funding for the Bureau of Reclamation to continue the implementation of the endangered fish recovery implementation programs for the Upper Colorado and San Juan River Basins . . .” § 1, 114 Stat. at 1602. As indicated by this statement of purpose, these programs had already been in effect for some time, having been launched by cooperative agreements in 1988 (Upper Colorado) and 1992 (San Juan). § 2(1), 114 Stat. at 1602. These programs involve both the federal government and the Upper Colorado River Basin states of Colorado, New Mexico, Utah, and Wyoming. § 2(3), 114 Stat. at 1602.

⁹⁹ Upper Colorado and San Juan River Basin Endangered Fish Recovery Programs Reauthorization Act of 2005, Pub. L. No. 109-183, 120 Stat. 290 (2006) (reauthorizing programs through 2010).

¹⁰⁰ Omnibus Public Land Management Act of 2009 § 9107 (reauthorizing programs through 2023).

¹⁰¹ Consolidated Natural Resources Act of 2008, Pub. L. No. 110-229, § 515, 122 Stat. 754, 847. The purpose of this statute was to authorize the Secretary of the Interior, “in partnership with the States [of Colorado, Nebraska, and Wyoming], other Federal agencies, and other non-Federal entities, to continue the cooperative effort among the Federal and non-Federal entities through the implementation of the Platte River Recovery Implementation Program for threatened and endangered species in the Central and Lower Platte River Basin . . .” *Id.*

¹⁰² Omnibus Public Land Management Act of 2009 §§ 9401-9404. This statute authorized the Secretary of the Interior to carry out a multi-species conservation program, § 9402(a), 123 Stat. at 1328, defined as “the cooperative effort on the Lower Colorado River between Federal and non-Federal entities in Arizona, California, and Nevada approved by the Secretary of the Interior on April 2, 2005,” § 9401(1), 123 Stat. at 1327.

¹⁰³ Energy and Water Development Appropriations Act, 2004, Pub. L. No. 108-137, § 209, 117 Stat. 1827, 1850 (2003). The statute directed the Interior Department to create the program “for purposes of improving the efficiency and expediting the efforts of the Endangered Species Act Collaborative Program Workgroup,” and ordered the agency to establish an executive committee for the program with one member each from the Bureau of Reclamation, the Fish & Wildlife Service, and seven specified interests. § 209(a), 117 Stat. at 1850. The initial program itself predated these statutes, however, having been established in January 2000. 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, 689 (2007).

¹⁰⁴ Energy and Water Development and Related Agencies Appropriations Act, 2008, Pub. L. No. 110-161, Div. C, § 205, 121 Stat. 1937, 1952 (2007). This measure altered the collaborative program somewhat, repealing the original 2003 provision, § 205(a), 121 Stat. at 1952, and ordering Interior to “establish an Executive Committee of the Middle Rio Grande Endangered Species Collaborative Program . . . consistent with the bylaws of the Middle Rio Grande

authorizations, one for the multi-faceted Calfed Bay-Delta program,¹⁰⁶ of which ecosystem restoration has been a major focus,¹⁰⁷ and one to implement a settlement agreement designed to restore flows and fish to the San Joaquin River below Friant Dam.¹⁰⁸ Congress has also appropriated money each year for the Central Valley Project Restoration Fund, created in 1992¹⁰⁹ primarily to support the habitat restoration, improvement and acquisition elements of the Central Valley Project Improvement Act.¹¹⁰

Legislation regarding specific fish and wildlife projects, by contrast, has largely focused on two states: Nevada and New Mexico.¹¹¹ Numerous statutes have provided authority and/or funds for the Bureau to take certain actions for the benefit of fish and wildlife in northern Nevada. For example, after the 2002 Farm Bill allocated to the Bureau \$200 million “to provide water to at-risk terminal lakes” but instructed it not to use the money to purchase or lease water rights,¹¹² a 2003 appropriations bill directed the Bureau to use the funds only for Nevada’s Pyramid, Summit, and Walker

Endangered Species Collaborative Program adopted on October 2, 2006,” § 205(b), 121 Stat. at 1952.

¹⁰⁵ Energy and Water Development and Related Agencies Appropriations Act, 2009, Pub. L. 111-8, div. C, § 206, 123 Stat. 601, 613 (codified at 5 U.S.C. § 3104 note (Supp. III 2009)).

¹⁰⁶ See *supra* note 44 and accompanying text.

¹⁰⁷ Calfed Bay-Delta Authorization Act, Pub. L. No. 108-361, § 103(d)(6), 118 Stat. 1681, 1690-92 (2004) (describing ecosystem restoration elements of Bay-Delta program).

¹⁰⁸ San Joaquin River Restoration Settlement Act, Pub. L. No. 111-11, §§ 10001-10203, 123 Stat. 1349 (2009). The settlement agreement underlying the statute was reached in 2006, § 10003(3), 123 Stat. at 1350, resolving litigation in which a U.S. District Court in California found that the Bureau of Reclamation had violated California law, specifically California Fish & Game Code section 5937, by operating Friant Dam so as to dry up the San Joaquin River and wipe out salmon runs. See *NRDC v. Patterson*, 333 F. Supp. 2d 906, 924-25 (E.D. Cal. 2004). The statute directed Interior to carry out the settlement’s provisions, including modifying Friant Dam operations to provide flows to revive the San Joaquin. § 10004(a), 123 Stat. at 1350.

¹⁰⁹ Reclamation Projects Authorization and Adjustment Act of 1992, Pub. L. No. 102-575, § 3407, 106 Stat. 4600, 4726.

¹¹⁰ Tit. XXXIV, 106 Stat. at 4706-31. Recent appropriations have ranged from a low of \$39.6 million for 2004, Energy and Water Development Appropriations Act, Pub. L. No. 108-137, tit. II, 117 Stat. 1827, 1846 (2003), to a high of \$59.1 million for 2008, Energy and Water Development and Related Agencies Appropriations Act, 2008, Pub. L. No. 110-161, div. C, tit. II, 121 Stat. 1937, 1950 (2007).

¹¹¹ Other than in these two states, Congress has purposely authorized few fish and wildlife projects since 2002. A rare example was the authorization for the Secretary of the Interior to remove Savage Rapids Dam on Oregon’s Rogue River to protect the habitat of local species, after first installing pumps to serve the Grants Pass Irrigation District. Energy and Water Development Appropriations Act, 2004 § 220.

¹¹² The statute provided, in a section titled “Desert Terminal Lakes”:

“(a) IN GENERAL.—Subject to subsection (b), as soon as practicable after the date of enactment of this Act, the Secretary of Agriculture shall transfer \$200,000,000 of the funds of the Commodity Credit Corporation to the Bureau of Reclamation Water and Related Resources Account, which funds shall—

”(1) be used by the Secretary of the Interior, acting through the Commissioner of Reclamation, to provide water to at-risk natural desert terminal lakes; and

”(2) remain available until expended.

”(b) LIMITATION.—The funds described in subsection (a) shall not be used to purchase or lease water rights.

Lakes.¹¹³ Later appropriations bills retained this geographic focus and earmarked these funds for specific purposes, which included water right acquisitions despite the limiting language of the Farm Bill.¹¹⁴ Acquiring these water rights was intended to benefit fish and wildlife by raising the levels of the terminal lakes and the rivers feeding them.

The fish and wildlife protection projects undertaken in New Mexico have largely involved efforts to provide habitat for the endangered Rio Grande silvery minnow.¹¹⁵ A 2002 appropriations bill allocated \$4 million for leasing up to 38,000 acre-feet of water on an “emergency” basis,¹¹⁶ facilitating a temporary water supply to prevent drying of the minnow’s last remaining habitat. Three years later, Congress authorized the Interior Department to study “the viability of establishing an off-channel sanctuary for the Rio Grande Silvery Minnow in the Middle Rio Grande Valley,”¹¹⁷ and if the Department determined the project to be viable, to design, construct, and operate it.¹¹⁸

Congress’s most notable action on the Rio Grande, however, served to *restrict* application of the Endangered Species Act (“ESA”) in order to pro-

Farm Security and Rural Investment Act of 2002, Pub. L. No. 107-171, § 2507, 116 Stat. 134, 275 (codified at 43 U.S.C. § 2211 note (2006)).

¹¹³ Energy and Water Development Appropriations Act, 2003, Pub. L. No. 108-7, div. D, § 207, 117 Stat. 133, 146 (2002). These three lakes are important to Indian Tribes located within Nevada. Pyramid Lake and Summit Lakes are located within Indian Reservations that bear their names; Walker Lake is just south of the Walker River Indian Reservation, through which flows the river which feeds the lake. *See The Pyramid Lake Paiute Tribe and their Culture*, PYRAMID LAKE, <http://www.pyramidlake.us/pyramid-lake-the-people.html> (last visited Nov. 15, 2010).

¹¹⁴ A later 2003 appropriations bill earmarked \$2.5 million for water right acquisitions by the State of Nevada, “[n]otwithstanding section 2507(b)” of the Farm Bill. § 217, 117 Stat. at 1852. Two years later, another appropriations bill allocated \$95 million for activities in the Walker River Basin, including water right acquisitions by the University of Nevada and the Walker River Paiute Tribe. Energy and Water Development Appropriations Act, Pub. L. No. 109-103, § 208, 119 Stat. 2247, 2268-69 (2005). Yet another appropriations bill allocated more than \$65 million for a variety of specified purposes in the Carson-Truckee-Pyramid Lake area. Energy and Water Development and Related Agencies Appropriations Act, 2008 § 208.

¹¹⁵ Listed as an endangered species in 1994, the Rio Grande silvery minnow was the named plaintiff in litigation over the responsibility of the Bureau to operate its projects so as to avoid jeopardizing the existence of the fish. *Rio Grande Silvery Minnow v. Keys*, 333 F.3d 1109 (10th Cir. 2003), *vacated as moot*, 355 F.3d 1215 (10th Cir. 2004). A congressional appropriations rider and subsequent settlement resolved issues relating to the San Juan-Chama Project, but litigation continued over the Bureau’s Middle Rio Grande Project. *See Katz, supra* note 103, at 685-89. The Tenth Circuit Court of Appeals vacated earlier opinions in the case based on mootness. *Rio Grande Silvery Minnow v. Bureau of Reclamation*, 601 F.3d 1096 (10th Cir. 2010).

¹¹⁶ 2002 Supplemental Appropriations Act for Further Recovery From and Response to the Terrorist Attacks on the United States, Pub. L. No. 107-206, ch. 5, 116 Stat. 820, 849 (codified in scattered sections of 2, 40, 42 U.S.C. (2006)).

¹¹⁷ The Department was to evaluate the project’s potential for “(1) providing off-channel, naturalistic habitat conditions for propagation, recruitment, and maintenance of Rio Grande silvery minnows; and (2) minimizing the need for acquiring water or water rights to operate the sanctuary.” Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, Pub. L. No. 109-13, ch. 3, § 6104, 119 Stat. 231, 283-84 (2005).

¹¹⁸ § 6104, 119 Stat. at 284.

tect traditional users of Bureau project water. In the Energy and Water Development Appropriations Act of 2004, a rider prohibited 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 declared that compliance with certain restrictions in a March 2003 Biological Opinion would fully satisfy ESA section 7.¹¹⁹ The original “minnow rider” locked in the 2003 Biological Opinion for two years,¹²⁰ but Congress soon extended that period to ten years.¹²¹ Congress also showed a measure of concern for the silvery minnow by pairing ESA limitations with authorization of the Endangered Species Collaborative Program for the Middle Rio Grande, and by allowing for leasing of San Juan-Chama water to meet the flow requirements of the 2003 Biological Opinion.¹²² While the minnow riders effectively reduced protection of the silvery minnow, they demonstrate Congress’s power (and willingness) to override a general program in particular circumstances, and more generally indicate the potential significance of fish and wildlife issues for the operation of reclamation projects.

Since the centennial of the 1902 Reclamation Act, Congress has demonstrated its priorities for the Bureau through dozens of site-specific measures, as described above. While Congress remains interested in pursuing traditional water projects (or at least studying semi-traditional ones), most of the post-2002 enactments reflect a shift in the Bureau’s mission toward a greater emphasis on rural water supply development; water reuse, recycling, and conservation projects; and fish and wildlife habitat programs.

¹¹⁹ 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 obligate funds appropriated for the current fiscal year or any prior Energy and Water Development Appropriations Act, or funds otherwise made available to the Commissioner of the Bureau of Reclamation, and 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.

(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, 2004, Pub. L. No. 108-137, § 208, 117 Stat. 1827, 1849-50 (2003).

¹²⁰ § 208(d), 117 Stat. at 1850.

¹²¹ Energy and Water Development Appropriations Act, 2005, Pub. L. No. 108-447, § 205(d), 118 Stat. 2935, 2949 (2004).

¹²² Energy and Water Development Appropriations Act, 2004 §§ 208-209.

In all of these areas *except* for fish and wildlife, however, Congress has combined site-specific measures with broader statutes providing more general authority to address modern water management concerns. The next Part focuses on these programmatic statutes.

IV. PROGRAMMATIC STATUTES FOR BUREAU ACTIVITIES

From its inception, the federal reclamation program has operated under a set of statutes that lay out a general framework for the planning, construction, operation, maintenance, and financial arrangement of reclamation projects. While Congress has never hesitated to supplement or vary such laws on a site-specific basis, these generally applicable statutes have provided authority and direction for the reclamation program as a whole. This Part briefly summarizes congressional actions establishing various kinds of Bureau activities, focusing primarily on programmatic statutes enacted since 2002.

A. *The General Reclamation Program*

The Reclamation Act of 1902 authorized a program for “the construction and maintenance of irrigation works for the . . . reclamation of arid and semiarid lands” in sixteen western states and territories.¹²³ The 1902 Act imposed several important requirements and limitations on the development of these projects and the use of their water. For example, the Secretary of the Interior had to determine that a potential project was “practicable and advisable” before building it.¹²⁴ No landowner could receive project water on more than 160 acres of land.¹²⁵ Farmers receiving irrigation water from a project had to repay their share of the project’s construction costs in ten annual payments to the reclamation fund (the source of federal money for reclamation projects).¹²⁶ Even after the construction costs of a project had been repaid, the U.S. would operate and retain title to its reservoir(s) unless Congress provided otherwise.¹²⁷ And the Secretary of the Interior was to carry out the reclamation program “in conformity” with state laws relating to irrigation water use.¹²⁸

In legislation regarding particular projects, Congress has often been willing to depart from the general provisions of reclamation law. For example, in 1905 Congress authorized the Rio Grande Project to provide benefits

¹²³ Act of June 17, 1902, Pub. L. No. 57-161, ch. 1093, § 1, 32 Stat. 388 (codified as amended at 43 U.S.C. § 391 (2006)).

¹²⁴ § 3, 32 Stat. at 388.

¹²⁵ § 5, 32 Stat. at 389.

¹²⁶ § 4, 32 Stat. at 389.

¹²⁷ § 6, 32 Stat. at 389.

¹²⁸ § 8, 32 Stat. at 390.

for a certain sector of Texas,¹²⁹ which was not one of the reclamation program states at that time.¹³⁰ A 1917 statute authorized special arrangements for “an auxiliary reclamation project or unit” in connection with the Yuma Project,¹³¹ including a newly established fund for payments associated with that specific project.¹³² In 1952, Congress exempted the San Luis Valley Project from the 160-acre limit on water deliveries to a single landowner, substituting a 480-acre limit for that project alone.¹³³

Congress has also repeatedly revised the general reclamation laws as it has perceived a need to incorporate new elements into the Bureau’s mission. A full explanation of such revisions is beyond the scope of this Article, but it is no exaggeration to say that Congress has altered nearly every element of the reclamation program’s original design. For example, Congress has acted on numerous occasions to ease the financial obligations of irrigators who receive project water,¹³⁴ beginning with a 1914 statute extending the repayment period to fifteen years.¹³⁵ Other statutes imposed new requirements for developing new projects,¹³⁶ generally changed the way that the Bureau contracts with users to supply project water for irrigation,¹³⁷ and altered the controversial acreage limitations on project water deliveries.¹³⁸ Perhaps most

¹²⁹ Rio Grande Reclamation Project Act of Feb. 25, 1905, Pub. L. No. 58-104, ch. 798, 33 Stat. 814.

¹³⁰ Congress left Texas out of the 1902 Reclamation Act but added it four years later. Act of June 12, 1906, Pub. L. No. 59-225, ch. 3288, 34 Stat. 259 (codified as amended at 43 U.S.C. § 391 (2006)).

¹³¹ Act of Jan. 25, 1917, Pub. L. No. 64-293, ch. 20, § 1, 39 Stat. 868.

¹³² § 3, 39 Stat. at 869. Section 4 of the Act of June 17, 1902 provided that such payments were meant to go to the reclamation fund. Act of June 17, 1902, Pub. L. No. 57-161, ch. 1093, § 4, 32 Stat. 388 (codified at 43 U.S.C. §§ 419, 461 (2006)).

¹³³ The statute insisted that it was intended to “meet the special conditions” of that project “and [should] not be considered as altering the general policy of the United States with respect to the excess-land provisions of the Federal reclamation laws.” Act of June 27, 1952, Pub. L. No. 82-415, ch. 478, 66 Stat. 282.

¹³⁴ For a summary of these enactments, see U.S. GEN. ACCOUNTING OFFICE, GAO/RCED-96-109, BUREAU OF RECLAMATION: INFORMATION ON ALLOCATION AND REPAYMENT OF COSTS OF CONSTRUCTING WATER PROJECTS 32-35 (1996).

¹³⁵ Act of August 13, 1914, Pub. L. No. 63-170, ch. 247, § 1, 38 Stat. 686 (codified at 43 U.S.C. §§ 471-72 (2006)).

¹³⁶ Reclamation Project Act of 1939, Pub. L. No. 76-260, ch. 418, § 9(a), 53 Stat. 1187, 1193 (codified at 43 U.S.C. § 485h (2006)) (mandating that a proposed project may not proceed until the Secretary of the Interior submits a report to the President and Congress that assesses the project’s feasibility and cost); Second Deficiency Appropriation Act, Fiscal Year 1924, Pub. L. No. 68-292, ch. 4, § 1, 43 Stat. 672, 685 (codified at 43 U.S.C. § 396 (2006)) (requiring proposed projects to be recommended by the Bureau and approved by the President as to feasibility and costs).

¹³⁷ See, e.g., Reclamation Project Act of 1939 § 9(e) (authorizing the water service contract at the Secretary of the Interior’s discretion, whereby the contracting district does not repay its full share of construction costs during the life of the contract, as an alternative to the traditional repayment contract); Omnibus Adjustment Act of May 25, 1926, Pub. L. No. 69-284, ch. 383, § 46, 44 Stat. 636, 649 (codified at 43 U.S.C. § 423e (2006)) (requiring that water supply contracts from new reclamation projects be made with irrigation districts rather than individual irrigators).

¹³⁸ Reclamation Reform Act of 1982, Pub. L. No. 97-293, §§ 202-207, 96 Stat. 1261, 1263-66 (codified at 43 U.S.C. §§ 390bb-gg (2006)) (raising the acreage limit to 960 acres for

importantly for purposes of this Article, Congress has effectively expanded the function of the reclamation program beyond irrigation, first by providing for the lease of hydropower generated at Bureau projects,¹³⁹ then by allowing the Bureau to “contract to supply water from any project irrigation system for other purposes than irrigation,”¹⁴⁰ and finally by establishing a specific framework for contracts to supply project water for municipal use.¹⁴¹

Congress has also endowed the Bureau with generalized authority to conduct new types of activities. Through the Small Reclamation Projects Act of 1956, for example, Congress provided federal assistance and encouraged state and local participation in the development of small projects,¹⁴² defined as those costing no more than \$10 million.¹⁴³ The Reclamation Safety of Dams Act of 1978 authorized the Bureau “to perform such modifications as [it] determines to be reasonably required” for the sake of “preserv[ing] the structural safety of Bureau of Reclamation dams and related facilities,”¹⁴⁴ while prohibiting construction for purposes of adding new conservation storage or developing new project benefits.¹⁴⁵ Thus, Congress has essentially added new programmatic features to the reclamation program in response to perceived problems or opportunities for the Bureau. The three measures described below are important examples of this type of expanded programmatic authority.

B. *Water Reuse and Recycling*

As stated above,¹⁴⁶ Congress added water reuse and recycling projects to the Bureau’s agenda through the sprawling Reclamation Projects Authori-

individuals and small business entities while providing for alternative acreage limits under certain circumstances). For a discussion of the acreage limitation controversy before and after this 1982 statute, see *WATERS & WATER RIGHTS*, *supra* note 29, § 41.03.

¹³⁹ Act of Apr. 16, 1906, Pub. L. No. 59-103, ch. 1631, § 5, 34 Stat. 116, 117 (codified at 43 U.S.C. § 522 (2006)) (authorizing ten-year leases of “surplus power or power privilege” at reclamation projects, with a preference for municipal purposes, provided that such leases do not interfere with irrigation).

¹⁴⁰ Miscellaneous Purposes Act of 1920, Pub. L. No. 66-147, ch. 86, 41 Stat. 451, 451-52 (codified at 43 U.S.C. § 521 (2006)) (authorizing such contracts “upon such conditions of delivery, use, and payment as [the Bureau] may deem proper,” but providing that such contracts may not interfere with irrigation or impair the rights of any prior appropriator).

¹⁴¹ Reclamation Project Act of 1939 § 9(c) (providing for forty-year repayment contracts, with interest, for municipal water supply or “miscellaneous purposes,” provided that such contracts do not interfere with irrigation).

¹⁴² Small Reclamation Projects Act of 1956, Pub. L. No. 85-984, ch. 972, § 1, 70 Stat. 1044, 1044 (codified at 43 U.S.C. § 422a (2006)).

¹⁴³ § 2(d), 70 Stat. at 1044. The current version of the Small Reclamation Projects Act requires the Secretary of the Interior to determine the project cost ceiling for a particular year “using the Bureau of Reclamation composite construction cost index for January of that year with \$15,000,000 as the January 1971 base.” 43 U.S.C. § 422b(f) (2006).

¹⁴⁴ Reclamation Safety of Dams Act of 1978, Pub. L. No. 95-578, § 2, 92 Stat. 2471, 2471 (codified at 43 U.S.C. § 506 (2006)).

¹⁴⁵ § 3, 92 Stat. at 2471.

¹⁴⁶ See *supra* notes 45–47 and accompanying text.

zation and Adjustment Act of 1992.¹⁴⁷ Title XVI of that act directed the Bureau “to undertake a program to investigate and identify opportunities for reclamation and reuse of municipal, industrial, domestic, and agricultural wastewater, and naturally impaired ground and surface waters, for the design and construction of demonstration and permanent facilities to reclaim and reuse wastewater.”¹⁴⁸ The clear intent of Title XVI was to promote water recycling and reuse, as indicated by the direction to assess “measures to stimulate demand for and eliminate obstacles to the use of reclaimed water

... .”¹⁴⁹

The 1992 statute empowered the Bureau to perform “appraisal investigations to identify opportunities for water reclamation and reuse,”¹⁵⁰ to participate in feasibility studies regarding proposed projects,¹⁵¹ and to build and operate demonstration or test projects.¹⁵² For good measure, the legislation included the first batch of Title XVI studies, programs, and projects, focused primarily in California.¹⁵³ Thus, Congress authorized a general program of assistance for water reuse and recycling projects while simultaneously directing the Bureau to use its new authority in several specific places.

The Reclamation Recycling and Water Conservation Act of 1996¹⁵⁴ continued the same approach, adding fifteen new projects to the Bureau’s plans¹⁵⁵ and imposing general requirements and restrictions on the Title XVI program. Most notably, the 1996 statute required that the Bureau complete a feasibility study and an approved cost-share agreement before any project could receive federal construction funds, and it capped the federal share of costs for any one project at \$20 million.¹⁵⁶ Congress has since continued adding projects to the list¹⁵⁷ and even expanded the program to include a new state, Hawaii.¹⁵⁸

¹⁴⁷ Reclamation Wastewater and Groundwater Study and Facilities Act, Pub. L. No. 102-575, tit. XVI, § 1602(a), 106 Stat. 4600, 4664 (1992) (codified at 43 U.S.C. § 390h (2006)).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ § 1603(a), 106 Stat. at 4664.

¹⁵¹ § 1604, 106 Stat. at 4665.

¹⁵² § 1605, 106 Stat. at 4665.

¹⁵³ The statute directed the Bureau to work on feasibility studies for projects in Southern California, § 1606, 106 Stat. at 4664, Phoenix, § 1608, 106 Stat. at 4664, Tucson, § 1609, 106 Stat. at 4664, Lake Cheraw in Colorado, § 1610, 106 Stat. at 4664, and San Francisco, § 1611, 106 Stat. at 4664, and to participate in designing and building demonstration projects in San Jose, § 1607, 106 Stat. at 4664, San Diego, § 1612, 106 Stat. at 4664, Los Angeles, § 1613, 106 Stat. at 4664, and the San Gabriel groundwater basin of California, § 1614, 106 Stat. at 4664.

¹⁵⁴ Reclamation Recycling and Water Conservation Act of 1996, Pub. L. No. 104-266, 110 Stat. 3289 (codified as amended at 43 U.S.C. § 390h (2006)).

¹⁵⁵ Nine of these projects were in California, four in Utah, and one each in Texas and Nevada. The statute also added a study in New Mexico. § 2, 110 Stat. at 3290-95.

¹⁵⁶ § 7, 110 Stat. at 3296.

¹⁵⁷ See *supra* notes 45–50 and accompanying text.

¹⁵⁸ Title XVI originally was limited to the seventeen states of the reclamation program, Reclamation Projects Authorization and Adjustment Act of 1992, Pub. L. No. 102-575, § 1602(b), 106 Stat. 4664 (codified at 43 U.S.C. § 390h (2006)), but Congress invited Hawaii

C. Rural Water Supply

Congress established the Bureau's rural water supply program by enacting the Reclamation Rural Water Supply Act of 2006.¹⁵⁹ The statute authorized the Bureau to design, construct, and operate rural water supply projects.¹⁶⁰ Unlike traditional reclamation projects, rural water supply projects cannot include "major impoundment structures" or supply water for commercial irrigation.¹⁶¹ The statute directed the Bureau to investigate and plan rural water supply projects,¹⁶² but to proceed with construction only if a project had been specifically authorized by Congress following submittal of the Bureau's feasibility report to the relevant congressional committees.¹⁶³ The program was authorized for up to \$15 million per year through 2016.¹⁶⁴

Even though Congress did not establish the Bureau's rural water supply program until 2006, it had already authorized the Bureau to build more than a dozen rural water projects.¹⁶⁵ Ironically, Congress may have previously chosen the Bureau for these projects partly *because* the Agency lacked a standardized program for reviewing such projects:

Unlike rural water supply programs within other agencies that have standing program authorization, the Bureau undertakes individual rural water supply projects at the express direction of Congress. Because rural water projects undertaken by the Bureau do not have clear eligibility and lack programmatic criteria, communities that do not meet criteria for other, authorized programs often approach Congress with proposals for water supply projects. Since the early 1980's, Congress has directed the Bureau to develop ten independently authorized single-purpose municipal and industrial water supply projects for rural communities throughout the Western United States. The Federal cost share, typically between 75

to the party when it authorized three projects in 2005, Hawaii Water Resources Act of 2005, Pub. L. No. 109-70, 119 Stat. 2009 (codified as amended at 43 U.S.C. § 390h (2006)).

¹⁵⁹ Rural Water Supply Act of 2006, Pub. L. No. 109-451, tit. I, 120 Stat. 3346 (codified as amended at 43 U.S.C. §§ 2401-2409 (2006)).

¹⁶⁰ § 103, 120 Stat. at 3347-48; *see supra* note 54 and accompanying text.

¹⁶¹ Rural Water Supply Act of 2006 § 102(9)(C).

¹⁶² § 103(a), 120 Stat. at 3347. Like Title XVI, the 2006 statute provided for appraisal investigations, § 105, 120 Stat. at 3349, and feasibility studies, § 106, 120 Stat. at 3351.

¹⁶³ § 103(a)(3), 120 Stat. at 3347. The statute directed the Bureau to provide feasibility reports indicating whether a project should be authorized for construction and what the non-federal cost share should be, and it directed the Bureau to deliver these reports to the Senate Energy and Natural Resources Committee and the House Resources Committee. § 106(e), 120 Stat. at 3353-54.

¹⁶⁴ § 109(a), 120 Stat. at 3356. The statute also provided that the rural water supply program would sunset on September 30, 2016. § 110, 120 Stat. at 3356.

¹⁶⁵ S. REP. NO. 109-148, at 19 (2005) (statement of John W. Keys III, Comm'r of the Bureau of Reclamation).

percent and 85 percent, of these projects tends to be much larger than programs administered by other agencies.¹⁶⁶

Establishing the Bureau's rural water supply program—a programmatic statute—served at least two distinct purposes. The Bureau supported the legislation as a way to bring order to the chaos created by willy-nilly congressional authorization of individual projects.¹⁶⁷ For its part, Congress believed that the program would allow the Bureau to offer better service to rural communities.¹⁶⁸ However, by requiring all projects to be specifically authorized before receiving construction funds,¹⁶⁹ Congress ensured that none would be built without its approval.

D. Water Conservation

The SECURE Water Act of 2009¹⁷⁰ permanently established a grant program within the Bureau to focus on promoting water conservation and efficiency measures. The statute authorized the Bureau to make grants or agreements to help an “eligible applicant” plan, design, or build an “improvement” to conserve water, increase water use efficiency, or enhance water management.¹⁷¹ An “eligible applicant” must be a state, Indian tribe, or an entity that delivers water or power.¹⁷² The statute did not define other key terms, but did indicate that an applicant could obtain funding not only to

¹⁶⁶ *Id.* at 12.

¹⁶⁷ In testifying on the legislation, the Commissioner of Reclamation, John W. Keys, stated:

Congress authorized and funded these projects without the benefit of rigorous economic justification and objective design review As expensive as the original thirteen Reclamation rural water projects are, they represent only the tip of the iceberg if no order and economic justification is introduced to screen projects.

Id. at 19.

¹⁶⁸ In characterizing the situation before the grant of programmatic authority, Congress explained, “[b]ecause the Bureau does not have an authorized rural water program, small communities seeking to address long-term water needs are unable to seek assistance from the Bureau. Rural communities must wait for Congress to direct the Bureau to proceed with appraisal and feasibility studies for a water supply project.” *Id.* at 13.

¹⁶⁹ Rural Water Supply Act of 2006, Pub. L. No. 109-451, § 103(a)(3), 120 Stat. 3345, 3347 (codified as amended at 43 U.S.C. §§ 2401-2408 (2006)) (authorizing the Bureau to oversee construction of projects “subsequently authorized by Congress”); § 109(c), 120 Stat. at 3356 (prohibiting use of any of the \$15 million annually authorized by the statute to pay construction costs).

¹⁷⁰ Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, §§ 9501-9510, 123 Stat. 991, 1329-46 (codified at 42 U.S.C. §§ 10361-10370 (Supp. III 2009)). SECURE is one of many tortured legislative acronyms, standing for “Science and Engineering to Comprehensively Understand and Responsibly Enhance.” S. 2156, 110th Cong. § 1(a) (2007).

¹⁷¹ Omnibus Public Land Management Act of 2009 § 9504(a)(1). The statute also allows for grants or agreements for “improvements” to serve other purposes, such as facilitating water markets, promoting the use of advanced water treatment technologies, or benefiting species that are listed or proposed for listing under the Endangered Species Act. *Id.*

¹⁷² § 9502(7), 123 Stat. at 1330 (defining water delivery organizations as irrigation districts, water districts, or other entities with water delivery power).

build a tangible improvement, but also to implement an “activity.”¹⁷³ The statute also authorized agreements with universities or other entities to fund research activities to promote water conservation and efficiency.¹⁷⁴ No grant or agreement could exceed \$5 million,¹⁷⁵ and the program was authorized to spend up to \$200 million over its lifetime.¹⁷⁶

The SECURE Water Act did not create an entirely new program; rather, the statute institutionalized and expanded a program launched by the Bureau in 2003 under its “Water 2025” initiative.¹⁷⁷ Congress first approved the Water 2025 grant program in an appropriations act enacted that year, and provided continuing authority and funding in future appropriations bills.¹⁷⁸ According to the Commissioner of Reclamation, the SECURE Water Act provided permanent authority for the Bureau:

to issue water conservation grants for qualified entities. This section would authorize the Water 2025 Program and is similar to authorizing legislation we submitted to the Committee as an administration proposal Permanent authorization would improve the long-term effectiveness of Water 2025 by allowing eligible entities to rely on the availability of the grants and therefore to invest resources in developing potential projects.¹⁷⁹

¹⁷³ The statute required an eligible applicant to “submit to the Secretary [of the Interior] an application that includes a proposal of the improvement or activity to be planned, designed, constructed, or implemented by the eligible applicant.” § 9504(a)(2), 123 Stat. at 1334-35; *see also* § 9504(a)(3)(E), 123 Stat. at 1335. The undefined term “activity” may have been used to encompass the development of water banks and other water marketing mechanisms as well as activities such as water conservation education; such efforts are supported in the legislation, but are not the kind of constructed works contemplated by the term “improvement.”

¹⁷⁴ Eligible research activities focus on conserving water, increasing water use efficiency, or enhancing water resource management. § 9504(b), 123 Stat. at 1336.

¹⁷⁵ § 9504(a)(3)(E)(iii), 123 Stat. at 1334.

¹⁷⁶ § 9504(e), 123 Stat. at 1336.

¹⁷⁷ For a description and critique of Water 2025 shortly after its initial rollout, see Reed D. Benson, *The Interior Department’s Water 2025: Blueprint for Balance, or Just Better Business as Usual?*, 33 ENVTL. L. REP. 10837 (2003). The Water 2025 policy statement discussed in this earlier article is evidently a dead letter, as it disappeared from the Bureau website as of 2010. But the Water 2025 grant program has taken root and grown over time, albeit under several different names. In describing its “Water Conservation Challenge Grants” (previously referred to as “Water for America Challenge Grants”), the Bureau stated: “Since 2004, over 150 challenge grant projects have been funded, combining \$36 million in Federal funding with local partnerships to construct over \$140 million worth of water management improvements in 16 western states.” BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, THE WATER CONSERVATION INITIATIVE AND IMPLEMENTATION OF THE SECURE WATER ACT 5 (Oct. 2009), <http://www.usbr.gov/WaterSMART/docs/Water%20Conservation%20Initiative%20and%20Implementation%20of%20the%20Secure%20Water%20Act.pdf>. The Bureau now calls them “WaterSMART Grants.” *Grants-WaterSMART Program*, BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, <http://www.usbr.gov/WaterSMART/grants.html> (last updated Oct. 27, 2010).

¹⁷⁸ *See supra* notes 94–95 and accompanying text.

¹⁷⁹ *SECURE Water Act: Hearing on S. 2156 Before the S. Comm. on Energy and Natural Res.*, 109th Cong. 9 (2007) (jointly-prepared statement of Robert Johnson, Comm’r, Bureau of Reclamation, and Robert M. Hirsch, Associate Director for Water, U.S. Geological Survey).

Although the SECURE Water Act continued a grant program that was already operating, the 2009 statute was significant in several respects. It expanded the program beyond what the earlier appropriations bills had provided, by both opening the door to proposals involving “activities” and adding new purposes for the program beyond water conservation and efficiency.¹⁸⁰ It also legitimized the program, eliminating objections to appropriating money for a program that had never been authorized.¹⁸¹ Moreover, it reflected a view that more federal money should go to these grants; for a program that had provided only \$36 million in grants through October 2009,¹⁸² funding at the authorized level of \$200 million¹⁸³ would represent a significant increase in resources, even if that sum were spread over several years.

E. Observations Regarding Programmatic Statutes

The SECURE Water Act and Reclamation Rural Water Supply Act are the latest acts of Congress giving the Bureau new programmatic authority to help develop and manage water resources. These recent statutes build on a long tradition of legislative revision and expansion of the reclamation program, beginning with early additions to the 1902 Act, running through Title XVI of the 1992 law, and continuing into the twenty-first century.

The water conservation and rural water supply provisions of the last five years, however, are not the only recent statutory additions to the reclamation program. For example, other provisions of the SECURE Water Act gave the Bureau new authority and direction to respond to the challenges of climate change; the newly authorized Reclamation Climate Change and Water Program¹⁸⁴ was probably the most significant element of the statute.

¹⁸⁰ Whereas the original appropriations measure had provided money for grants for “planning, designing, and constructing improvements that will conserve water, increase water use efficiency, or enhance water management through measurement or automation, at existing water supply projects,” *see supra* note 96 and accompanying text, the SECURE Water Act indicated that other kinds of water management projects would be eligible for a grant. *See infra* notes 215–218 and accompanying text.

¹⁸¹ The House Appropriations Committee in 2006, at least, regarded the absence of an authorization as a reason not to fund the program. “The budget request includes \$14,500,000 for Water 2025 While the Committee remains supportive of the program, given its lack of authorization, the Committee has not provided funding for the Water 2025 program for fiscal year 2007.” H.R. REP. NO. 109-474, at 60 (2006).

¹⁸² *See infra* note 185.

¹⁸³ “There is authorized to be appropriated to carry out this section \$200,000,000, to remain available until expended.” Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, § 9504(e), 123 Stat. 991, 1336 (codified at 42 U.S.C. § 10364 (Supp. III 2009)). Actual funding for the program, of course, depends on subsequent appropriations.

¹⁸⁴ The SECURE Water Act directed the Secretary of the Interior to establish a climate change adaptation program:

(1) to coordinate with the Administrator [of the National Oceanic and Atmospheric Administration] and other appropriate agencies to assess each effect of, and risk resulting from, global climate change with respect to the quantity of water resources located in a service area; and

Another 2009 enactment, headed Aging Infrastructure,¹⁸⁵ gave the Bureau new direction to inspect reclamation project facilities posing risks to urbanized areas¹⁸⁶ and to perform “any extraordinary operation and maintenance work” deemed necessary for the safety of the project.¹⁸⁷ The 2006 Twenty-First Century Water Works Act¹⁸⁸ established a program whereby the Bureau would provide loan guarantees—“an entirely new tool for the Bureau”¹⁸⁹—to states, tribes, or water supply entities for new rural water projects or repair/replacement of facilities associated with an existing reclamation project.¹⁹⁰

This brief review demonstrates that Congress has been actively revising and expanding the reclamation program to meet the challenges of water management in the West. Statutes have given the Bureau both power to tackle modern problems and direction to address unmet needs. Congress has asked the Bureau to stretch existing water supplies (through the Title XVI and SECURE Water grant programs), to serve new constituencies (through the rural water supply program), to address problems associated with existing reclamation projects (under the dam safety and aging infrastructure statutes), and to anticipate and minimize the effects of climate change on water resources (through the climate change adaptation program of the SECURE Water Act).

In modernizing the Bureau’s governing statutes, Congress has not attempted to provide a unified set of management priorities for the agency. In other words, Congress has not provided an organic act to govern the Bureau in managing its projects—that is, a “comprehensive charter” for the reclamation program¹⁹¹—as it has for land management agencies such as the Forest Service, Bureau of Land Management, and most recently the Fish &

(2) to ensure, to the maximum extent possible, that strategies are developed at watershed and aquifer system scales to address potential water shortages, conflicts, and other impacts to water users located at, and the environment of, each service area.

§ 9503(a), 123 Stat. at 1332. The program requires Interior to not only study possible water supply effects and risks associated with climate change, but also “develop appropriate strategies to mitigate each impact of water supply changes,” including modifying reservoir operations and developing new water management plans. § 9503(b)(4), 123 Stat. at 1332.

¹⁸⁵ Bureau of Reclamation Authorizations: Aging Infrastructure, Pub. L. No. 111-11, tit. IX, subtit. G, 123 Stat. 991, 1346 (codified at 42 U.S.C. § 510 (Supp. III 2009)).

¹⁸⁶ § 9602, 123 Stat. at 1347-48.

¹⁸⁷ § 9603(a), 123 Stat. at 1348.

¹⁸⁸ Twenty-First Century Water Works Act, Pub. L. No. 109-451, tit. II, 120 Stat. 3345, 3356 (2006) (codified as amended at 43 U.S.C. §§ 2421-2434 (2006)). Title I of this statute is the Reclamation Rural Water Supply Act, discussed above.

¹⁸⁹ S. REP. NO. 109-148, at 24 (2005) (statement of John W. Keys III, Comm’r of the Bureau of Reclamation).

¹⁹⁰ Twenty-First Century Water Works Act §§ 202-204.

¹⁹¹ See Robert L. Fischman, *The Meanings of Biological Integrity, Diversity, and Environmental Health*, 44 NAT. RESOURCES J. 989, 993 (2004) (“Organic legislation, such as the 1997 [National Wildlife Refuge System Improvement] Act, is a comprehensive charter for a public land system.”). In the case of the Bureau, organic legislation would set forth principles and priorities for managing all the reclamation projects across the West. The characteristics of organic legislation are discussed below. See *infra* notes 284-290 and accompanying text.

Wildlife Service.¹⁹² Congress instead has proceeded incrementally, establishing or revising programs on a piecemeal basis, resulting in a sort of patchwork quilt of reclamation program authorities. New panels have been added to that quilt in recent years, authorizing new programs to help the Bureau meet water needs in the twenty-first century. And yet, Congress has left a gaping hole in that statutory quilt by failing to provide the Bureau with general authority to take actions for the benefit of fish and wildlife affected by reclamation projects. The next Part of this article addresses this important programmatic gap.

V. THE MISSING PROGRAMMATIC AUTHORIZATION: ENVIRONMENTAL RESTORATION

Environmental concerns, particularly those involving fish and wildlife habitat, are some of the most common and pressing issues facing the Bureau in the second century of the reclamation program. The importance of fish and wildlife is indicated by the Bureau's public statements¹⁹³ and by the many recent statutes authorizing basin-specific programs intended to benefit fish and wildlife (especially species protected by the Endangered Species Act).¹⁹⁴

Basin-specific authorizing statutes focusing on fish and wildlife are not a new phenomenon; to the contrary, Congress enacted several such measures in the 1990s.¹⁹⁵ Probably the most important and best known of these laws was the Central Valley Project Improvement Act,¹⁹⁶ which made protection and restoration of fish and wildlife an authorized purpose of California's huge Central Valley Project,¹⁹⁷ and even reallocated 800,000 acre-feet of project water for "fish, wildlife, and habitat restoration purposes."¹⁹⁸ The Truckee-Carson-Pyramid Lake and Water Rights Settlement Act¹⁹⁹ focused heavily on restoring Pyramid Lake fisheries and the Truckee River, which

¹⁹² See Robert L. Fischman, *The National Wildlife Refuge System and the Hallmarks of Modern Organic Legislation*, 29 *ECOLOGY* L.Q. 457, 501-08 (2002) (describing evolution of the concept of "organic" legislation leading up to the enactment of the 1997 organic act for the National Wildlife Refuge System).

¹⁹³ See *supra* notes 10, 26-31 and accompanying text.

¹⁹⁴ See *supra* Part III.E.

¹⁹⁵ Some basin-specific fish and wildlife restoration statutes date back even earlier. See, e.g., Trinity River Basin Fish and Wildlife Management Act of 1984, Pub. L. No. 98-541, 98 Stat. 2721. Congress found that construction of the Trinity River Division of the Central Valley Project had led to a "drastic reduction" in salmon populations, § 1(1), 98 Stat. at 2721, and the Secretary of the Interior needed "additional authority to implement a management program . . . to achieve the long-term goals of restoring fish and wildlife populations in the Trinity River Basin." § 1(6), 98 Stat. at 2721.

¹⁹⁶ Central Valley Project Improvement Act, Pub. L. No. 102-575, tit. XXXIV, 106 Stat. 4600, 4706 (1992).

¹⁹⁷ § 3406(a), 106 Stat. at 4714.

¹⁹⁸ § 3406(b), 106 Stat. at 4714.

¹⁹⁹ Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990, Pub. L. No. 101-618, tit. II, 104 Stat. 3289, 3294.

feeds the lake; the statute authorized operation of the Newlands Project for fish and wildlife purposes²⁰⁰ and contained numerous provisions intended to benefit these interests.²⁰¹ Yet another example of relatively early fish and wildlife legislation is the Yakima River Basin Water Enhancement Project. Created by a 1994 statute,²⁰² it was intended primarily “to protect, mitigate, and enhance fish and wildlife through improved water management.”²⁰³ The centerpiece of the Yakima legislation was a water conservation program designed to make additional water available for both instream flows and irrigated agriculture.²⁰⁴

Additionally, in numerous cases plaintiffs have sued the Bureau over its alleged failure to meet legal duties relating to the protection of fish and wildlife.²⁰⁵ These cases and statutes illustrate that serious fish and wildlife issues confront the Bureau throughout its territory—from the Platte River of the Great Plains to the San Joaquin of the Central Valley; from the Rio Grande of the arid Southwest to the Klamath of the coastal Northwest; from the sparsely populated Upper Colorado Basin to the heavily urbanized San Francisco Bay-Delta.

Given the obvious importance of environmental concerns to the reclamation program, the Bureau’s lack of general authority to address these is-

²⁰⁰ The statute converted Newlands from a single-purpose to a multi-purpose project:

(1) In addition to the existing irrigation purpose of the Newlands Reclamation Project, the Secretary is authorized to operate and maintain the project for the purposes of:

(A) fish and wildlife, including endangered and threatened species;

(B) municipal and industrial water supply in Lyon and Churchill counties, Nevada, including the Fallon Indian Reservation;

(C) recreation;

(D) water quality; and

(E) any other purposes recognized as beneficial under the law of the State of Nevada.

§ 209(a), 104 Stat. at 3317.

²⁰¹ *See, e.g.*, § 206, 104 Stat. at 3308 (protection of 25,000 acres of Lahontan Valley wetlands); § 207, 104 Stat. at 3312 (recovery and enhancement of Lahontan cutthroat trout and cui-ui, two protected species of fish in Pyramid Lake); § 208, 104 Stat. at 3815 (\$25 million in funding for the Pyramid Lake Paiute tribal fisheries program); § 209, 104 Stat. at 3317 (measures designed to reduce the impact of Newlands Project irrigation operations on the Truckee River and Pyramid Lake).

²⁰² Yavapai-Prescott Indian Tribe Water Rights Settlement Act of 1994, Pub. L. No. 103-434, tit. XII, 108 Stat. 4526, 4550.

²⁰³ § 1201(1), 108 Stat. at 4550.

²⁰⁴ § 1201(3)–(4), 108 Stat. at 4550 (describing water conservation program and stating eight-year goals of 110,000 acre-feet of saved water for fish and wildlife and 55,000 acre-feet of water for irrigation per year); *see also* § 1203, 108 Stat. at 4551 (directing the Secretary of the Interior to establish the Yakima River Basin Water Conservation Program and describing it in detail).

²⁰⁵ *See, e.g.*, *Pac. Coast Fed’n of Fishermen’s Ass’ns v. U.S. Bureau of Reclamation*, 426 F.3d 1082 (9th Cir. 2005) (regarding Bureau’s Klamath Project); *NRDC v. Houston*, 146 F.3d 1118 (9th Cir. 1998) (regarding Bureau’s Central Valley Project); *Rio Grande Silvery Minnow v. Keys*, 469 F. Supp. 2d 1003 (D.N.M. 2005) (regarding Bureau’s Middle Rio Grande Project).

sues is remarkable.²⁰⁶ While Congress has established programmatic authority in areas such as water recycling and reuse, rural water projects, and water conservation—areas in which it has similarly done significant site-specific legislating²⁰⁷—it has done no such thing where fish and wildlife are concerned. The remainder of this Part reviews existing programmatic statutes that stop short of giving the Bureau the relevant authority, examines a statute that does confer such authority on the Corps of Engineers, and concludes with ideas on appropriate elements for a statute authorizing the Bureau to deal generally with fish and wildlife issues.

A. General Reclamation Statutes Involving Fish and Wildlife

1. SECURE Water Act

The 2009 SECURE Water Act authorized a grant program giving the Bureau clear but limited authority to address fish and wildlife matters.²⁰⁸ Under that Act, the Bureau may make grants of up to \$5 million either “to prevent the decline” of species being considered for listing under the ESA²⁰⁹ or to promote the recovery of a threatened or endangered species affected by a reclamation project.²¹⁰ The statute also authorizes grants for an activity that will “address any climate-related impact to the water supply of the United States that increases ecological resiliency to the impacts of climate change” or “prevent any water-related crisis or conflict at any watershed that has a nexus to a Federal reclamation project located in a service area.”²¹¹ By authorizing federal grants for actions that would increase ecological resiliency²¹² or prevent water-related conflict,²¹³ the statute gives the Bureau great

²⁰⁶ For a sample of environmental restoration activities at various reclamation projects, see MacDonnell, *supra* note 24, at 201-49 (describing Bureau efforts in the Truckee-Carson, Yakima, and Upper Colorado river basins).

²⁰⁷ See *supra* Part III.

²⁰⁸ See *supra* Part III.D.

²⁰⁹ To qualify, a species must have been either proposed for ESA listing or must be a candidate species that has not yet been proposed. Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, § 9504(a)(1)(F), 123 Stat. 991, 1334 (codified at 42 U.S.C. § 10364 (Supp. III 2009)).

²¹⁰ The statute authorizes grants “to accelerate the recovery of threatened species, endangered species, and designated critical habitats that are adversely affected by Federal reclamation projects or are subject to a recovery plan or conservation plan under the [ESA] under which the Commissioner of Reclamation has implementation responsibilities.” Omnibus Public Land Management Act of 2009 § 9504(a)(1)(G).

²¹¹ § 9504(a)(1)(H), 123 Stat. at 1334.

²¹² The SECURE Water Act does not define “ecological resiliency,” but the term figures prominently in the climate change adaptation portion of the statute. See *infra* notes 226-228 and accompanying text. According to Professor Flournoy, the concept of ecological resilience “can help us to describe the degree of disturbance a system can tolerate before it flips into another behavior regime. Resilience expresses the ability of a system to rebound from disturbance and the point at which a disturbance triggers a shift in the structure of the system.” Alyson C. Flournoy, *Protecting a Natural Resource Legacy While Promoting Resilience: Can It Be Done?*, 87 NEB. L. REV. 1008, 1024 (2009).

discretion to provide funding for measures that would benefit fish and wild-life species and their habitats.

This grant program, which the Interior Department has now packaged as “WaterSMART,”²¹⁴ gives the Bureau a useful tool for addressing environmental issues; however, as currently authorized, the program promises limited benefits. For one thing, Congress has capped spending at \$200 million for the life of the program, and that money may be used to fund a variety of projects and activities across seventeen states.²¹⁵ The statute places no explicit priority on one purpose over another,²¹⁶ meaning that much of the money can be expected to go to water conservation, treatment, or management projects rather than those designed primarily for environmental benefits. This is true, in part, because these types of water projects—as compared to environmental restoration—tend to be better received by the communities in areas served by the Bureau, and to channel money to the Bureau’s traditional constituents. Furthermore, even a maximum \$5 million grant would not necessarily go far in addressing a long-term environmental problem associated with operation of a reclamation project.²¹⁷

Aside from the limited supply of dollars, the program faces various shortcomings associated with its design as a grant program. The Bureau can act only in response to an application from a state, Indian tribe, or “organization with water or power delivery authority.”²¹⁸ This prerequisite poses no real obstacle to grants for water infrastructure projects, but may raise a serious barrier to environmental initiatives sponsored by nonprofit conservation or recreation groups. Similarly, the firm requirement of at least a 50% non-federal cost-share²¹⁹ requires the applicant to have another major source of

²¹³ The Interior Department’s *Water 2025* policy statement focused heavily on preventing conflicts associated with water shortages, with an emphasis on conflicts caused by the water needs of endangered species, and those caused by the demands of growing cities. *See* Benson, *supra* note 177, at 10838, 10844-46.

²¹⁴ The acronym “SMART” stands for “Sustain and Manage America’s Resources for Tomorrow.” *WaterSMART Program*, BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, <http://www.usbr.gov/WaterSMART/index.html> (last visited Oct. 28, 2010). The grant program is one of several elements of Interior’s WaterSMART Initiative, which also includes the Title XVI program and certain studies of western river basins. *Id.*

²¹⁵ Omnibus Public Land Management Act of 2009 § 9504(a) (authorizing grants to assist eligible applicants in “planning, designing, or constructing any improvement” to serve any of seven listed purposes, or in carrying out “any other activity” to serve one of two other purposes).

²¹⁶ § 9504(a)(1), 123 Stat. at 1334 (stating nine different purposes for grants, with environmental concerns appearing only in subsections (F), (G), and (H)(i)).

²¹⁷ Consider that Congress spent \$4 million on an “emergency” lease of 38,000 acre-feet in the Middle Rio Grande for 2002 alone. *See supra* note 116 and accompanying text. More recently, Congress estimated that restoration efforts on one river, the San Joaquin, would cost \$440 million, to be funded by a mix of federal and non-federal money. Omnibus Public Land Management Act of 2009 § 10009.

²¹⁸ § 9502(7), 123 Stat. at 1330 (defining “eligible applicant”).

²¹⁹ The SECURE Water Act absolutely requires a 50% cost-share for grants. § 9504(a)(3)(E), 123 Stat. at 1335. The statute only allows the Interior Department to waive the 50% non-federal share of feasibility studies for climate change adaptation. § 9503(d), 123

financing. This requirement effectively favors water suppliers who can access taxpayer or ratepayer funds. Opening the grant program to fish and wildlife projects is a positive step, but it does not necessarily make the program feasible for many proponents of such projects.

Perhaps more important, the program does not authorize the Bureau to modify its own facilities or operations. Although grants to non-federal entities may facilitate the adoption of measures that mitigate the environmental impact of reclamation projects, meaningful restoration of aquatic and riparian ecosystems seems unlikely if the projects continue to exist and operate as they always have. The Bureau must be authorized to modify dams, diversions, and other project facilities, and to alter the storage, release, and diversion of project water, for the purpose of restoring habitats that have been impaired by the construction or operation of the project.²²⁰

In another portion of the SECURE Water Act, Congress did recognize the potential for changes to project operations and infrastructure. Under the new climate change adaptation program,²²¹ the Bureau must “consider and develop appropriate strategies” to mitigate various impacts of climate change on water supplies,²²² including impacts on fish, wildlife, water quality, and recreation.²²³ These strategies may include modifying existing reservoir operations,²²⁴ developing new plans for managing water or restoring habitat, or promoting water conservation;²²⁵ the Bureau may also study “the construction of any water supply, water management, environmental, or habitat enhancement water infrastructure that the Secretary determines to be necessary to address the effects of global climate change on water resources”²²⁶ Thus, the statute contemplates that changes to project facilities and operations may be needed to address the environmental impacts of climate change.

Here again, however, Congress stopped short of giving the Bureau the authority needed to address the environmental impact of reclamation projects. For one thing, because it focuses on the impact of water supply changes that may result from climate change,²²⁷ the statute seemingly fails to address other longstanding environmental impacts of existing projects.

Stat. at 1333–34. The waiver must be based on financial hardship to the non-federal participant in the study. § 9503(d)(2), 123 Stat. at 1333.

²²⁰ See MacDonnell, *supra* note 24, at 217–22 (describing changes in reclamation project facilities, and especially in operations, to provide fish and wildlife benefits). For a more detailed discussion of ways to alter project operations to improve downstream flows, see Brian D. Richter & Gregory A. Thomas, *Restoring Environmental Flows by Modifying Dam Operations*, 12 *ECOLOGY AND SOC'Y* 1(12):12 (2007) (detailing ways to alter project operations to improve downstream flows).

²²¹ See *supra* note 184 and accompanying text.

²²² Omnibus Public Land Management Act of 2009 § 9503(b)(4).

²²³ § 9503(b)(3), 123 Stat. at 1332.

²²⁴ § 9503(b)(4)(A), 123 Stat. at 1332.

²²⁵ § 9503(b)(4)(B), 123 Stat. at 1332.

²²⁶ § 9503(d)(1), 123 Stat. at 1333.

²²⁷ § 9503(b)(3), 123 Stat. at 1332 (requiring analysis of “the extent to which changes in the water supply of the United States will impact” various water-dependent interests);

Moreover, while Congress clearly directed the Bureau to develop strategies for addressing the effects of climate change, it did not explicitly authorize the Bureau to implement those strategies.²²⁸

2. *Reclamation States Emergency Drought Relief Act*

The closest thing to a programmatic statute authorizing the Bureau to act for the benefit of fish and wildlife dates back to 1992. In the Reclamation States Emergency Drought Relief Act (“Drought Relief Act”),²²⁹ Congress authorized the Bureau to take significant actions to benefit fish and wildlife populations affected by reclamation project operations in drought-stricken areas of the West.²³⁰ Additionally, the Drought Relief Act authorized the Bureau to adopt contingency plans designed to prevent or mitigate the impacts of drought.²³¹ These plans could call for the use of water to achieve several goals, including providing “water supplies for fish and wildlife.”²³² Upon adoption of such a drought plan or a request by a state governor or Indian tribe,²³³ the Bureau can “make water from Federal Reclamation projects and nonproject water available on a nonreimbursable basis for the

§ 9503(b)(4), 123 Stat. at 1332 (requiring development of “strategies to mitigate each impact of water supply changes analyzed by the Secretary under paragraph (3)”).

²²⁸ The statute directs the Secretary of the Interior to “consider and develop strategies to mitigate each impact.” § 9503(b)(4), 123 Stat. at 1332. However, it provides only for studies “to *determine the feasibility* and impact on ecological resiliency of implementing each mitigation and adaptation strategy.” § 9503(d)(1), 123 Stat. at 1333 (emphasis added). Another provision provides that nothing in the SECURE Water Act “supersedes or limits any existing authority provided, or responsibility conferred, by any provision of law.” § 9510(a), 123 Stat. at 1346. Thus, even though the statute requires the Secretary to report to Congress on “each mitigation and adaptation strategy considered and implemented by the Secretary,” § 9503(c)(3), 123 Stat. at 1333, it is not obvious that authority to implement those strategies may be found in the SECURE Water Act itself.

²²⁹ Reclamation States Emergency Drought Relief Act of 1991, Pub. L. No. 102-250, 106 Stat. 53 (codified in scattered sections of 43 U.S.C. from §§ 2201 to 2247 (2006)).

²³⁰ § 302, 106 Stat. at 58.

²³¹ More specifically, the statute authorized the Bureau, in consultation with other federal and non-federal entities, “to prepare or participate in the preparation of cooperative drought contingency plans (hereinafter in this title referred to as “contingency plans”) for the prevention or mitigation of adverse effects of drought conditions.” § 202, 106 Stat. at 56-57.

²³² § 203(a)(6), 106 Stat. at 57; *see also* § 203(a)(4), 106 Stat. at 57 (allowing use of project facilities to convey non-project water for various purposes, including fish and wildlife).

²³³ The statute says:

The programs and authorities established under this title shall become operative in any Reclamation State only after the Governor or Governors of the affected State or States, or on a reservation, when the governing body of the affected tribe has made a request for temporary drought assistance and the Secretary has determined that such temporary assistance is merited, or upon the approval of a drought contingency plan as provided in title II of this Act.

§ 104(a), 106 Stat. at 56. While the statute is garbled in describing the requisite state action, the Bureau’s power to act is apparently triggered by a governor’s request for assistance and federal assent to that request. The original House Bill 355 clearly provided for this triggering mechanism, but made no mention of tribal governing bodies. *See* H.R. REP. NO. 102-21, at 3 (1991). The ambiguity apparently arose when the language was inserted regarding tribes.

purposes of protecting or restoring fish and wildlife resources, including mitigation losses, that occur as a result of drought conditions or the operation of a federal reclamation project during drought conditions.”²³⁴ Under such conditions, the Bureau may also purchase water for various purposes, including fish and wildlife habitat.²³⁵ Finally, Congress gave the Bureau both broad authority to implement the statute and specific direction to consider fish and wildlife needs in doing so:

The Secretary is authorized to perform any and all acts and to promulgate such regulations as may be necessary and appropriate for the purpose of implementing this Act. In carrying out the authorities under this Act, the Secretary shall give specific consideration to the needs of fish and wildlife, together with other project purposes, and shall consider temporary operational changes which will mitigate, or can be expected to have an effect in mitigating, fish and wildlife losses and damages resulting from drought conditions, consistent with the Secretary’s other obligations.²³⁶

The Bureau’s fish and wildlife authority under the Drought Relief Act is somewhat unclear and subject to certain constraints: certain provisions indicate that the Bureau’s actions must be consistent with existing laws²³⁷ and with its “other obligations.”²³⁸ Such provisions could be read, for example, to prohibit release of water for fish habitat from a project authorized solely for irrigation and hydropower,²³⁹ although such an interpretation would seem

²³⁴ Reclamation States Emergency Drought Relief Act of 1991 § 102(d).

²³⁵ The Bureau can only purchase water from willing sellers, which could include water users with contracts for reclamation project water:

In order to minimize losses and damages resulting from drought conditions, the Secretary may purchase water from willing sellers, including, but not limited to, water made available by Federal Reclamation project contractors through conservation or other means with respect to which the seller has reduced the consumption of water. Except with respect to water stored, conveyed or delivered to Federal and State wildlife habitat, the Secretary shall deliver such water pursuant to temporary contracts under section 102 . . .

§ 101(c), 106 Stat. at 53. The Bureau used this authority to acquire water for the Middle Rio Grande during the drought of the early 2000s. *See* Contracts between the Bureau of Reclamation and the City of Albuquerque to Lease the Use of San Juan-Chama Project Water, Contract Nos. 02-WC-40-8210 (2002) and 00-WC-40-6630 (2000) (on file with the Harvard Journal on Legislation).

²³⁶ Reclamation States Emergency Drought Relief Act of 1991 § 302.

²³⁷ “All actions taken pursuant to this Act pertaining to the diversion, storage, use, or transfer of water shall be in conformity with applicable State and applicable Federal law.” § 304(a), 106 Stat. at 59.

²³⁸ § 302, 106 Stat. at 58.

²³⁹ The author finds only one case in which the Drought Relief Act was a disputed issue. In the *Rio Grande Silvery Minnow* litigation, the parties disagreed on the meaning of the statute, with the environmental plaintiffs focusing on the authority to make water available for fish and wildlife, and the federal government and water users focusing on the language requiring any such action to be consistent with the Bureau’s other obligations. Brief of Plaintiffs-Appellees at 51-52, *Rio Grande Silvery Minnow v. Keys*, 333 F.3d 1109 (10th Cir. 2003) (Nos. 02-2254, 02-2255, 02-2267, 02-2295 & 02-2304), 2002 WL 32879652, at *51-52; Brief

contrary to the fundamental purpose of the statute.²⁴⁰ Additionally, an obvious limitation is that the statute is geared toward addressing environmental impact during drought periods, as it generally authorizes only temporary new facilities²⁴¹ and seems to contemplate only temporary operational changes.²⁴² Certain of the Bureau's authorities are even time-limited: the emergency assistance provisions of Title I, including the authority to acquire water from willing sellers and to make project water available for fish and wildlife, were originally good for only ten years²⁴³ and are currently set to expire in 2012.²⁴⁴

There are, however, permanent authorizations in the Drought Relief Act that the Bureau could dust off and use to benefit fish and wildlife affected by reclamation projects. Both the contingency planning and rulemaking provisions of the statute specifically invite the Bureau to address drought-related impact on fish and wildlife. Adoption of a drought contingency plan would trigger the Bureau's emergency assistance powers,²⁴⁵ including the ability to provide project water for fish and wildlife or acquire water supplies from willing sellers. Periodic review of these plans, as required by the statute,²⁴⁶ would help ensure that they remain up to date in light of changing circumstances. Congress saw drought contingency plans as a way to help reduce the

of Federal Appellants at 31-32, *Rio Grande Silvery Minnow v. Keys*, 333 F.3d 1109 (10th Cir. 2003) (Nos. 02-2254, 02-2255, 02-2267, 02-2295 & 02-2304), 2002 WL 32879498, at *31-32; Reply Brief of Appellant Middle Rio Grande Conservancy District at 18-21, *Rio Grande Silvery Minnow v. Bureau of Reclamation*, 601 F.3d 1096 (10th Cir. 2010) (Nos. 05-2399, 06-2020, & 06-2021), 2006 WL 3293790, at *18-21.

²⁴⁰ According to a report of the House Interior and Insular Affairs Committee, the "primary purpose" of the legislation was to give the Bureau "sufficient temporary authority to provide water to those users and areas which will suffer severe and irreplaceable losses because of the drought . . . including providing water to those users and uses which do not normally receive water from Bureau projects." H.R. REP. NO. 102-21, at 6 (1991). Thus, Congress evidently intended that the statute would allow Bureau projects to deliver water for purposes not normally served by those projects. This could include fish and wildlife projects. That intent would be defeated by a narrow interpretation that would prohibit use of project water for "new" purposes not already served by a project.

²⁴¹ Reclamation States Emergency Drought Relief Act of 1991 § 101(a).

²⁴² § 302, 106 Stat. at 58.

²⁴³ § 104(c), 106 Stat. at 56.

²⁴⁴ *Id.* Congress later extended the effective date of Title I to September 30, 2005. Hawaii Water Resources Act of 2000, Pub. L. No. 106-566, § 201(a), 114 Stat. 2818, 2820 (codified at 43 U.S.C. § 2214 (2006)). The authority lapsed, but Congress revived it in 2006. *See* Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, Pub. L. No. 109-234, § 2306(a), 120 Stat. 418, 456 (codified as amended at 43 U.S.C. § 2214 (2006)). Congress recently extended the authority for two years until September 30, 2012. Supplemental Appropriations Act, Pub. L. No. 111-212, § 404(a), 124 Stat. 2302, 2313 (2010).

²⁴⁵ The Bureau's powers under Title I of the statute are triggered either by a state or tribal request for assistance *or* by approval of a drought contingency plan. Reclamation States Emergency Drought Relief Act of 1991 § 104(a).

²⁴⁶ "The contingency plans shall include provisions for periodic review to assure the adequacy of the contingency plan to respond to current conditions, and such plans may be modified accordingly." § 203(e), 106 Stat. at 57.

human and environmental impact of drought;²⁴⁷ used as directed, these plans might provide a dose of preventive medicine for drought-related water ills such as the Klamath Basin water crisis of 2001.²⁴⁸

The Drought Relief Act does give the Bureau significant authority to address the impact of droughts on fish and wildlife, but the Bureau has done remarkably little with that authority in terms of developing a program. The Bureau has not only failed to use its rulemaking power, but it also lacks internal guidance on drought assistance and contingency planning under the statute; it appears that draft guidance documents from 2002 were never finalized.²⁴⁹ Thus, even though the Bureau has internal “directives and standards” posted online for everything from management of shooting ranges on Bureau lands to the inadvertent discovery of human remains, there is no comparable guidance for drought planning or assistance.²⁵⁰ And in its Fiscal Year 2011 Budget Request, the Bureau sought only \$380,000 for the Drought Emergency Assistance Program²⁵¹—a microscopic sum in the context of a budget request of nearly \$1.1 billion.²⁵²

B. General Restoration Authority for Water Projects: The Corps of Engineers’ Section 1135 Power

Like the Bureau, the U.S. Army Corps of Engineers operates hundreds of water projects for a variety of purposes.²⁵³ But the Corps has something

²⁴⁷ “Having such ‘on-the-shelf’ contingency plans in place will allow the Federal government and the States cooperatively to anticipate drought conditions and act early to prevent or at least mitigate the adverse impact that drought conditions may have on environmental resources and water users.” H.R. REP. NO. 102-21, at 7 (1991).

²⁴⁸ In a 2002 article on the Klamath crisis, this author argued (without mentioning the Drought Relief Act) that the Bureau might have mitigated the effects of the 2001 drought had it followed through on its promise in the mid-1990s to develop a long-term operations plan for the Klamath Project. Reed D. Benson, *Giving Suckers (and Salmon) an Even Break: Klamath Basin Water and the Endangered Species Act*, 15 TUL. ENVTL. L.J. 197, 236 (2002).

²⁴⁹ The Bureau hosts a web page devoted to its drought program, which includes a link to the Drought Relief Act. *Policy and Program Services: Drought Program*, BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, <http://www.usbr.gov/drought> (last visited Oct. 28, 2010). Under the heading “Interim Directives & Standards,” the page states, “Reclamation is working to update and finalize the Drought Directives and Standards, which will be posted here when available. The drafts below are for reference only.” Links given include “Title I: Emergency Assistance” and “Title II: Contingency Planning.” Clicking on those links brings up documents marked DRAFT and dated Apr. 12, 2002. *Id.*

²⁵⁰ *Reclamation Manual—Directives and Standards*, BUREAU OF RECLAMATION, U.S. DEP’T OF THE INTERIOR, <http://www.usbr.gov/recman/DandS.html> (last visited Oct. 28, 2010). The shooting range guidance is under the Environmental Management tab, ENV 02-07; the human remains guidance is under the Land Management and Development tab, LND 07-01.

²⁵¹ U.S. BUREAU OF RECLAMATION, BUDGET JUSTIFICATIONS AND PERFORMANCE INFORMATION, FISCAL YEAR 2011 BW-20 (2010), available at <http://www.usbr.gov/budget/2011/2011Budget.pdf>.

²⁵² The Bureau stated its FY 2011 Budget Request as “\$1,064.7 million in gross budget authority.” *Id.* at General Statement–1.

²⁵³ The Corps says that its flood control infrastructure, which includes 383 reservoirs, prevented an estimated \$419 billion in flood damages through Fiscal Year 2000; that its 75 multipurpose reservoirs generate about 24% of all hydropower in the U.S., enough for 10

that the Bureau does not: general authority to modify water project facilities and operations for environmental benefits, as follows:

The Secretary [of the Army] is authorized to carry out a program for the purpose of making such modifications in the structures and operations of water resources projects constructed by the Secretary which the Secretary determines (1) are feasible and consistent with the authorized project purposes, and (2) will improve the quality of the environment in the public interest.²⁵⁴

In addition to this power to modify projects, the Corps has programmatic authority to assess the environmental impacts of its existing projects and take independent measures to promote environmental restoration:

If the Secretary determines that construction of a water resources project by the Secretary or operation of a water resources project constructed by the Secretary has contributed to the degradation of the quality of the environment, the Secretary may undertake measures for restoration of environmental quality and measures for enhancement of environmental quality that are associated with the restoration, through modifications either at the project site or at other locations that have been affected by the construction or operation of the project, if such measures do not conflict with the authorized project purposes.²⁵⁵

These modifications or environmental restoration measures require a 25 percent non-Federal cost share,²⁵⁶ and may be sponsored by a state, local, or tribal government or—crucially—a nonprofit organization.²⁵⁷ No more than \$5 million in federal money may be spent on any one modification or measure,²⁵⁸ and the program as a whole is authorized for no more than \$40 million annually.²⁵⁹

The power to modify Corps projects to benefit the environment originated in section 1135 of the Water Resources Development Act of 1986²⁶⁰ and is commonly referred to as “1135 authority.” Congress was cau-

million homes; that its recreation sites at 463 projects host over 370 million recreational visitor-days annually; and that its projects supply 3 trillion gallons of water to 10 million people in 115 cities. DEP'T OF THE ARMY, CORPS OF ENGINEERS, CIVIL WORKS STRATEGIC PLAN FISCAL YEAR 2004–FISCAL YEAR 2009 40–43 (2004), http://www.vtn.iwr.usace.army.mil/pdfs/cw_strat.pdf.

²⁵⁴ 33 U.S.C. § 2309a(b) (Supp. I 2007).

²⁵⁵ § 2309a(c).

²⁵⁶ § 2309a(d).

²⁵⁷ The nonprofit entity must have the consent of the affected local government. § 2309a(g); *see also* 42 U.S.C. § 1962d-5b (Supp. I 2007) (describing contracts between the Corps and non-Federal interests, defined in subsection (b) to include “a legally constituted public body (including a federally recognized Indian tribe)”).

²⁵⁸ § 2309a(d).

²⁵⁹ § 2309a(h).

²⁶⁰ Water Resources Development Act of 1986, Pub. L. No. 99-662, § 1135, 100 Stat. 4082, 4251 (codified at 33 U.S.C. § 2294 (2006)).

tious in the 1986 act, however, authorizing only a two-year demonstration program for project modifications.²⁶¹ The Corps's project modification authority was made permanent in 1990,²⁶² and the additional restoration authority was added in 1996.²⁶³ Congress also showed its support for 1135 authorities by raising the annual authorization ceiling, first from \$15 million to \$25 million in 1992²⁶⁴ and then to \$40 million in 2007.²⁶⁵ Actual appropriations for the 1135 program have been fairly consistent at levels between \$20 million and \$30 million over the past ten years, averaging about \$28.3 million since 2006.²⁶⁶

Obviously, the Corps's 1135 authority to address project-related environmental concerns far surpasses the Bureau's in several key respects.²⁶⁷ First, it is national, not limited to a particular project or geographic area. Second, it is general, not limited to particular kinds of problems such as drought or endangered species. Third, it acknowledges the environmental harms caused by federal water projects and empowers the agency to redress some of those harms. Fourth, it clearly authorizes permanent modification of both project facilities and operations, so long as any change is feasible and consistent with authorized project purposes.

²⁶¹ § 1135(b), 100 Stat. at 4251. The 1986 act also authorized the Corps "to review the operation of water resources projects constructed by the Secretary before the date of enactment of this Act to determine the need for modifications in the structures and operations of such projects for the purpose of improving the quality of the environment in the public interest." § 1135(a), 100 Stat. at 4251.

²⁶² Water Resources Development Act of 1990, Pub. L. No. 101-640, § 304(b)(1), 104 Stat. 4604, 4634 (codified as amended at 33 U.S.C. § 2309a (2006)).

²⁶³ Water Resources Development Act of 1996, Pub. L. No. 104-303, § 204(c), 110 Stat. 3658, 3678-79 (codified as amended at 33 U.S.C. § 2309a (2006)).

²⁶⁴ Water Resources Development Act of 1992, Pub. L. No. 102-580, § 202(2), 106 Stat. 4797, 4826 (codified as amended at 33 U.S.C. § 2309a (2006)); *see also* Water Resources Development Act of 1986 § 1135 (setting original limit of \$15 million annually).

²⁶⁵ Water Resources Development Act of 2007, Pub. L. No. 110-114, § 2024, 121 Stat. 1041, 1079 (codified as amended at 33 U.S.C. § 2309a (Supp. I 2007)); *see also* § 1135(3), 100 Stat. 4082, 4251 (1986) (setting original limit of \$15 million annually).

²⁶⁶ Spreadsheet attachment to e-mail from Taunja Berquam, House Appropriations Comm. Staff, to Reed D. Benson, Professor, Univ. of N.M. Sch. of Law (Mar. 22, 2010 at 1:12 MDT) (on file with the Harvard Journal on Legislation).

²⁶⁷ In fact, section 1135 is only one of several authorities that the Corps may employ for restoration purposes. The variety of the Corps's powers is suggested by an annotated map showing projects where the Corps and The Nature Conservancy (a major environmental non-profit group) are working together. Attachment to e-mail from Andrew Warner, Senior Adviser for Water Mgmt., The Nature Conservancy, to Reed D. Benson, Professor, Univ. of N.M. Sch. of Law (Apr. 16, 2010 at 10:17 MDT) (on file with the Harvard Journal on Legislation). In tiny typeface, the map identifies and describes nearly fifty such projects across the country, in various stages of development. Only five of these projects were done under 1135, however; each of the others proceeded under one of seven other areas of authority or programs established by statute. This Article does not attempt to explain these areas of authority—but instead refers to them merely to suggest that the Corps does not lack the statutory power to investigate and conduct restoration activities. The Memorandum of Understanding between the Corps and the Conservancy is available at U.S. DEP'T OF THE ARMY, CORPS OF ENGINEERS & THE NATURE CONSERVANCY, MEMORANDUM OF UNDERSTANDING (2000), <http://www.iwt.usace.army.mil/inside/people/partners/TNC-MOU.pdf>.

In short, since making the 1135 authority permanent in 1990, Congress has retained and expanded the Corps's powers and increased spending for this purpose—suggesting that federal water projects and environmental restoration can indeed coexist to Congress's satisfaction.

C. Concluding Thoughts on Programmatic Environmental Authority for the Bureau

In many reclamation statutes, including several enacted since 2002, Congress has repeatedly addressed environmental issues—particularly those involving endangered species—as they relate to the reclamation program. Taken together, these statutes indicate that Congress recognizes the importance of these issues, sees that the Bureau can play a positive role in addressing environmental concerns, and understands that changes to project operations and facilities may prove beneficial. The climate change provisions of the SECURE Water Act reflect a sense that environmental problems will only grow more intense and intractable as the West warms.²⁶⁸ Yet, Congress has not given the Bureau programmatic authority to address environmental issues more generally associated with reclamation projects, even as it has provided new, wide-ranging powers in areas such as water conservation and rural water supply.

Some might argue that Congress has adequately addressed the Bureau's environmental issues through site-specific statutes. However, the review of recent such enactments in Part III.E. indicates two major shortcomings of this practice. First, the site-specific approach almost inevitably means that a project's chances of being approved will depend less on its merits than on the power, influence and priorities of its congressional sponsor or sponsors. Since 2002, such measures have focused heavily on Nevada and New Mexico, two states with fairly small populations²⁶⁹ but serious clout in the Senate.²⁷⁰ This Article does not suggest that Congress was wrong to authorize

²⁶⁸ See Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, § 9503(a), 123 Stat. 991, 1332 (2009) (describing purposes of the climate change adaptation program, including assessment of water-related risks and effects of climate change, and development of strategies “to address potential water shortages, conflicts, and other impacts . . .”).

²⁶⁹ The Census Bureau estimated that Nevada had just under 2 million people and New Mexico had about 1.82 million people in 2000. *State and County Quick Facts*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd> (click the map image of each state) (last visited Oct. 29, 2010).

²⁷⁰ Senator Harry Reid (D-Nev.), of course, is currently Senate Majority Leader, and has been the Senate's top Democrat since 2004. See *About Harry Reid*, UNITED STATES SENATOR HARRY REID, <http://reid.senate.gov/about/index.cfm> (last visited Oct. 27, 2010). New Mexico's senior senator until 2008 was Pete Domenici (R-N.M.), who chaired the Energy and Natural Resources Committee in the 108th and 109th Congresses (2003–07), having served previously as chair of the Budget Committee. See *Domenici, Pete Vichi – Biographical Information*, BIOGRAPHICAL DIRECTORY OF THE U.S. CONG., <http://bioguide.congress.gov/scripts/biodisplay.pl?index=d000407> (last visited Oct. 29, 2010). When the Democrats gained control of the Senate, New Mexico's other senator, Jeff Bingaman (D-N.M.), became chair of the Energy and Natural Resources Committee, a position he held in the 111th Congress. See *About Sena-*

projects and fund activities in these two states; rather the point is that many states have ecosystems that have also been harmed by Bureau projects, and that would benefit from restoration.²⁷¹ Continuing the practice of providing only *ad hoc* authorizations means perpetuating a system where the Bureau may be unable to pursue beneficial, cost-effective restoration simply because the would-be project is not backed by a Harry Reid, or Pete Domenici. Continuing the practice of providing only *ad hoc* authorizations means perpetuating a system where many meritorious projects have little realistic chance of moving forward.

A second problem is that recent statutes authorizing basin-specific environmental programs have been driven almost entirely by attempts to protect wildlife under the Endangered Species Act.²⁷² And though endangered species protection is obviously important, certain difficulties arise when the Bureau's programmatic environmental authorities seem to revolve around this single issue. Authorities tied to the ESA are too narrow, in that they apply only where a listed species is present and exclusively to the needs of that species,²⁷³ leaving too many places and too many interests out in the cold. Linking environmental authorizations solely to endangered species also ef-

tor Jeff Bingaman, UNITED STATES SENATOR JEFF BINGAMAN, <http://bingaman.senate.gov/about> (last visited Oct. 29, 2010).

²⁷¹ As noted by the authors of a book on instream flow protection,

Some of the West's major watercourses that are now dry or virtually dry during substantial portions of the year include the Snake River below Milner Dam in Idaho; the Gila River and, below Theodore Roosevelt Dam, the Salt River in Arizona; the Powder River in Oregon; the Arkansas River near the Colorado-Kansas border; the Rio Grande River below Elephant Butte Reservoir in New Mexico; and the San Joaquin River below Friant Dam in California. Virtually every substantial river contains at least a few dams, as do many of the smaller rivers. . . . Depleted or nonexistent flows in river channels are a fact of life throughout much of the West.

DAVID M. GILLILAN AND THOMAS C. BROWN, *INSTREAM FLOW PROTECTION: SEEKING A BALANCE IN WESTERN WATER USE* 40 (1997). Theodore Roosevelt, Elephant Butte, and Friant Dams are all Bureau facilities, and reclamation projects contribute to the drying of the Snake, Powder, and Arkansas Rivers described in this paragraph. <http://www.usbr.gov/projects> (last visited Nov. 9, 2010). Wyoming's Big Horn River is another waterway that would surely benefit from restoration, having been significantly degraded by the operation of a Bureau project. See *infra* note 281. In all of these places, flow restoration, at least, could provide significant benefits.

²⁷² The major exception since 2002 has been the authorization for the San Joaquin River restoration settlement. See *supra* note 108 and accompanying text. A California statute, CAL. FISH & GAME CODE § 5937 (West 2010), requires dams to release enough water to preserve downstream fisheries, and a court had held that the Bureau violated that statute in operating Friant Dam. *NRDC v. Patterson*, 333 F. Supp. 2d 906, 924-25 (2004). Although the San Joaquin settlement was driven more by state law than by the ESA, the statutory authorization was similar to those involving ESA programs, in that it was motivated by a mandatory legal requirement to improve downstream flows for the benefit of fish habitat.

²⁷³ The ESA protects single species, initially through agency determinations of whether a particular species should be listed as threatened or endangered. 16 U.S.C. § 1533(a). Commentators have long recognized that this single-species approach limits the effectiveness of the ESA. For example, twenty years ago Holly Doremus lamented "the ESA's emphasis on protection of one species at a time and its concentration on preventing the 'taking' of listed species. Given the modern state of the law and scientific knowledge, the statute should be modified to address the problem of loss of biological diversity more effectively." Holly Doremus, *Patch-*

fectively encourages litigation: by scratching only where there is an ESA itch, Congress inadvertently creates powerful incentives to get new species listed for purposes of obtaining leverage. A narrow focus on endangered species also leaves environmental efforts highly vulnerable to judicial decisions. For instance, if a court were to hold that the Bureau lacked the discretion to alter project operations for the benefit of listed species, then the risk of water delivery cutbacks under the ESA would decrease, possibly leading some states and water users to abandon ESA collaborative programs.²⁷⁴ Thus, while endangered species protection should remain a priority, Congress's recent practice suggests that ESA compliance is virtually the *only* priority for the Bureau's environmental efforts,²⁷⁵ and that is very poor policy.

In order to provide the Bureau with the power and direction needed to address these issues going forward, Congress could begin by revisiting the Drought Relief Act. Most obviously and immediately, Congress should strike the 2012 sunset date for Title I, making the emergency assistance provisions permanent. A revised statute should also clarify that existing laws and other "obligations" do not negate the thrust of the Bureau's Drought Relief Act authorities, and should authorize permanent operational changes if the Bureau determines that they would make a project more "drought-proof." Finally, Congress should include provisions—such as statutory deadlines for rulemaking or for the adoption and periodic review of drought contingency plans—to ensure that the Bureau actually uses its enhanced authority.²⁷⁶

ing the Ark: Improving Legal Protection of Biological Diversity, 18 Ecology L.Q. 265, 287 (1991).

²⁷⁴ By agency rule and Supreme Court decision, ESA section 7 applies only to "discretionary" federal actions. *National Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007) (upholding 50 C.F.R. § 402.03 (2009)). In an earlier article, the author contended that Bureau project operations are discretionary actions for purposes of ESA compliance, despite arguments to the contrary. Reed D. Benson, *Dams, Duties, and Discretion: Bureau of Reclamation Water Project Operations and the Endangered Species Act*, 33 COLUM. J. ENVTL. L. 1, 32-51 (2007). The author also suggested that if courts were to hold otherwise, some entities might walk away from collaborative endangered species programs. *Id.* at 53-55.

²⁷⁵ The SECURE Water Act grant authorization takes a half-step in the right direction by focusing not only on actions to benefit threatened and endangered species, but also on efforts to keep candidate species from being listed under the ESA and on activities that can increase ecological resiliency to the effects of climate change. *See supra* Part IV.A.1.

²⁷⁶ The legislative history indicates that Congress wanted the Bureau to act quickly under the original Drought Relief Act. Both the House and Senate committee reports contain this sentence: "The Committee expects that regulations will be promulgated in a timely manner, consistent with the intent of the Committee that actions taken pursuant to H.R. 355 be accomplished promptly so that the effects of the drought may be mitigated as soon as possible." H.R. REP. NO. 102-21, at 17 (1991); S. REP. NO. 102-185, at 16 (1991). Perhaps the committees actually expected quick action on new rules, or maybe they simply wanted to send a message to the Bureau through legislative history; in any event, the regulations were not forthcoming. That same legislative history indicates that the Drought Relief Act was largely motivated by events in California. It could be that when Congress simultaneously passed the Central Valley Project Improvement Act to respond to the California drought crisis, *supra* notes 196-198, the

A somewhat more satisfactory fix would give the Bureau general restoration authority, similar to that of the Corps of Engineers. As it did in section 1135, Congress should provide clear authority to make permanent changes to project facilities and operations for a broad range of environmental purposes. Of course, section 1135 also requires that such changes be consistent with the authorized purposes of the project. A new statute should allow the Bureau to take actions even when it will affect existing project purposes or its original beneficiaries. To promote restoration effectively, Congress must authorize the Bureau to take actions that would produce major environmental benefits while having only minor impacts on existing uses. For example, an operational change that would greatly benefit water quality and fish habitat should not be prohibited based merely on a slightly increased risk of modest shortages to project irrigators, or a small loss of hydropower production. Finally, a successful restoration program will require not just adequate authority, but also adequate funding. The Bureau will need money for activities such as restoring aquatic or riparian habitats that have been degraded by projects, acquiring water rights from willing sellers, and building or modifying infrastructure to deliver environmental benefits. While these actions are costly, they could also yield significant benefits in helping resolve potentially serious water supply and management problems, just like rural water supply and water reuse/recycling projects under Title XVI. In recent years, Congress has found money for the latter types of projects, and has also spent nearly \$30 million annually on the Corps's 1135 program. A restoration program to address environmental problems associated with reclamation projects should be no less of a priority.

Even if it gave the Bureau general statutory authority for environmental restoration, Congress would, of course, retain the final say over the Bureau's exercise of that authority. The Title XVI and Rural Water Supply Act programs offer examples of Congress retaining a role in determining the projects that receive Bureau assistance.²⁷⁷ Conversely, the Middle Rio Grande "minnow rider"²⁷⁸ demonstrates Congress's ability to block or constrain agency action that would otherwise proceed under a general statute.²⁷⁹

Bureau focused on implementing that California-specific statute rather than the Drought Relief Act.

²⁷⁷ Congress authorized individual water reuse and recycling projects at the time it enacted Title XVI, and has continued individual project authorizations under this program ever since. See *supra* notes 147-158 and accompanying text. When Congress authorized the Rural Water Supply Program, it required specific congressional authorization of any new project before construction could begin. See *supra* notes 159-164 and accompanying text.

²⁷⁸ See *supra* notes 119-120 and accompanying text.

²⁷⁹ See, e.g., Matt Jenkins, *Feinstein's Water Bomb*, HIGH COUNTRY NEWS (Feb. 12, 2010), <http://www.hcn.org/articles/feinsteins-water-bomb> (In 2010, Senator Diane Feinstein of California threatened to pursue legislation exempting certain Central Valley agricultural water pumping from the ESA. "Feinstein's office has not released a final draft of the rider Sources who helped craft the amendment say that it won't be a flat-out waiver of Endangered Species Act protections—but, for fish, the rider may be even worse than an outright waiver" by authorizing pumping at levels even higher than would be allowed if only the ESA restrictions were lifted.).

A programmatic statute would not free the Bureau from congressional control—only from the inefficiencies and shortcomings of site-specific authorization to conduct environmental restoration activities.

Without such new authority and increased funding, the Bureau simply lacks the tools to deal systematically with the fish and wildlife issues that affect countless reclamation projects across the West. Perpetuating the current approach would mean that the Bureau's environmental efforts continue to be inordinately driven by ESA listings and litigation²⁸⁰ and that some rivers degraded by Bureau projects continue to languish in the absence of site-specific restoration authority.²⁸¹ Providing the legal tools certainly would not resolve all of the Bureau's environmental problems, any more than Section 1135 and a statutory "environmental protection mission"²⁸² have solved all of the Corps's.²⁸³ But the Bureau would at least be minimally equipped for

²⁸⁰ The following quote from an early decision in the *Rio Grande Silvery Minnow* case indicates the importance, heretofore, of ESA litigation in motivating restoration efforts:

I believe it is appropriate to compliment Plaintiffs' counsel for their work on behalf of the endangered silvery minnow and the entire middle Rio Grande system. It is my impression that at the time this lawsuit was filed, not much was being done by the federal agencies, or by the other major players with interests in the middle Rio Grande, to confront seriously the hard, difficult issues that had to be addressed in order to protect the minnow, and the river itself. By filing this lawsuit, the Plaintiffs' attorney got the ball rolling, prompting all interested parties to come up with far-reaching solutions to the problems that once seemed insurmountable.

Rio Grande Silvery Minnow v. Keys, 469 F. Supp. 2d 973, 1002 (D. N.M. 2002).

²⁸¹ One such river is the Big Horn in Wyoming, which has long suffered from low flows, impaired quality, and degraded fish habitat, largely due to operation of an upstream Bureau project. The Big Horn flows through the Wind River Indian Reservation for many miles, but much of this reach suffers from low flows and excessive sediment. "During the dry years of the 1980s, there were times you couldn't have gotten a child's bathtub toy down this stretch of river" because of irrigation diversions; "[t]he biggest one is the Midvale/Riverton Unit, which takes by far the largest amount of water from the river . . . [I]n dry years there's not much flowing under the bridge by Riverton." GEOFFREY O'GARA, *WHAT YOU SEE IN CLEAR WATER: LIFE ON THE WIND RIVER RESERVATION* 84 (2000). The "Midvale/Riverton Unit" refers to the Riverton Unit, a reclamation project operated by Midvale Irrigation District. *Id.* at 27–32. Leaders of the tribes of the Wind River Reservation "claim this stretch of river could be a blue-ribbon fishery if managed properly." *Id.* at 84. The tribes tried in vain to use a portion of their own water rights to improve flows in the river bordering their reservation, but were stymied by the Wyoming courts in the 1990s, and problems persist today. See 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, 1171–76 (2006). Despite all of these reasons why Congress should consider a program to address these problems on the Big Horn, however, no basin-specific restoration authority applies to it.

²⁸² Congress declared in 1990, "The Secretary shall include environmental protection as one of the primary missions of the Corps of Engineers in planning, designing, constructing, operating, and maintaining water resources projects." Water Resources Development Act of 1990, Pub. L. 101-640, § 306(a), 104 Stat. 4604, 4635 (codified as amended at 33 U.S.C. § 2309a (2006)).

²⁸³ See, e.g., U.S. GEN. ACCOUNTING OFFICE, GAO-02-574, U.S. ARMY CORPS OF ENGINEERS: SCIENTIFIC PANEL'S ASSESSMENT OF FISH AND WILDLIFE MITIGATION GUIDANCE 4 (2002) (finding that of forty-seven Corps projects requiring fish and wildlife mitigation plans, twenty-eight projects had less than fifty percent of the planned mitigation completed before construction began, twelve had not begun construction, and only seven projects had more than fifty percent of mitigation completed before construction).

one of the most important and pressing challenges facing the reclamation program in the years ahead.

Filling out the Bureau's statutory toolbox is necessary, albeit potentially insufficient, to make environmental restoration a more successful component of the reclamation program. General statutes such as the Drought Relief Act and Section 1135 provide authority to benefit the environment, but no direction or requirement to do so. Without clear goals and priorities from Congress, the Bureau's environmental restoration efforts may be limited to scattered, opportunistic positive actions—the proverbial random acts of kindness.

If it wants to raise the priority and maximize the effectiveness of the Bureau's environmental restoration efforts, Congress should consider going a step further, and replacing the current patchwork quilt of authorities with a modern organic act²⁸⁴ for the Bureau. Since the mid-1970s, organic acts have strengthened and clarified the environmental missions of three major federal land management agencies.²⁸⁵ Specific provisions of a potential reclamation organic act are beyond the scope of this Article, but such a statute should draw on the examples of these other organic acts, setting a clear environmental standard or goal for project operations,²⁸⁶ and directly addressing the role and priority of environmental restoration in relation to the Bureau's established mission and priorities.²⁸⁷ The Corps of Engineers lacks such a stat-

²⁸⁴ Professor Fischman has described five “hallmarks for legislation deserving the term ‘organic act.’ They are: purpose statements, designated uses, comprehensive planning, substantive management criteria, and public participation. Although not every major public lands act possesses each of these attributes, these hallmarks do characterize modern public lands organic law” Robert L. Fischman, *The National Wildlife Refuge System and the Hallmarks of Modern Organic Legislation*, 29 *ECOLOGY L.Q.* 457, 510 (2002). He states that an organic act operates “to coordinate the disparate units of a public land system so that they cohere rather than fragment. In its ideal form, an organic act makes public land units more than the sum of their parts, just as the human body is more than just a wet bag of organs.” *Id.* at 513.

²⁸⁵ See Robert B. Keiter, *Ecological Concepts, Legal Standards, and Public Land Law: An Analysis and Assessment*, 44 *NAT. RESOURCES J.* 943, 945-59 (2004) (identifying ecological standards in the 1976 National Forest Management Act, Pub. L. No. 94-588, 90 Stat. 2949 (codified at 16 U.S.C. §§ 1601-1614 (2006)) (“NFMA”), the 1976 Federal Land Policy and Management Act, Pub. L. No. 94-579, 90 Stat. 2743 (codified at 43 U.S.C. §§ 1701-1784 (2006)) (“FLMPA”), and the 1997 National Wildlife Refuge System Improvement Act, Pub. L. No. 105-57, 111 Stat. 1252 (1997) (codified at 16 U.S.C. §§ 668dd, 668ee (2006)) (“NWRSA”). NFMA, FLMPA, and the NWRSA are the organic acts for the Forest Service, Bureau of Land Management, and Fish & Wildlife Service’s National Wildlife Refuge system, respectively.).

²⁸⁶ “In contrast to the Flood Control Act [governing Corps of Engineers reservoir operations on the Missouri River], all three public lands organic acts—NFMA, FLMPA, and the Refuge Act—allow multiple uses while providing for ecosystem protection by directing that diversity be maintained, undue degradation be avoided, or uses be compatible with conservation objectives.

Sandra B. Zellmer, *A New Corps of Discovery for Missouri River Management*, 83 *NEB. L. REV.* 305, 344 (2004) (citing the relevant provisions of the three organic acts).

²⁸⁷ See Keiter, *supra* note 285, at 959-61 (discussing how organic acts for the Forest Service and the National Wildlife Refuge System have related ecological standards to established land uses and management priorities).

ute (although Professor Zellmer has called for an organic act to reform and govern the Corps's dam operations on the Missouri River)²⁸⁸ yet still far surpasses the Bureau in terms of general programmatic authority for environmental restoration. An organic act for the Bureau would unify and clarify the authorities governing the West's many reclamation projects, but it would also pose an enormous policy and political challenge given the interests of established users,²⁸⁹ as well as the variety of existing projects with their own specific authorizations. Congress managed to overcome a somewhat similar challenge, however, in enacting the 1997 organic act for the National Wildlife Refuge system, with its many disparate and diverse uses.²⁹⁰

In sum, Congress has taken important steps to modernize the reclamation program, expanding and updating the Bureau's authorities to address key water resource issues in today's West. But there is a major piece of unfinished business: general statutory power for the Bureau to conduct environmental restoration associated with its projects. A new programmatic statute should allow restoration of fish and wildlife populations and habitats wherever they have been harmed by reclamation projects, and should free the Bureau to conduct restoration where it can produce the greatest public benefits, instead of having such efforts dictated chiefly by political influence or the presence of ESA-listed species. Such authority would help the Bureau, now in its second century, to be a more effective water management agency for the West in the twenty-first century.

²⁸⁸ Zellmer, *supra* note 286, at 346-47; see also Christine A. Klein & Sandra B. Zellmer, *Mississippi River Stories: Lessons from a Century of Unnatural Disasters*, 60 SMU L. REV. 1471, 1535-36 (2007) (calling for an Interior Rivers Ecosystem Act to govern Corps operations in the Mississippi River basin).

²⁸⁹ In several ongoing cases, reclamation project irrigators have sought compensation from the government for a taking of property or breach of contract caused by reduced water deliveries allegedly caused by ESA requirements. See A. DAN TARLOCK ET AL., WATER RESOURCE MANAGEMENT 527-40 (6th ed. 2009); see also *Stockton East Water Dist. v. United States*, 583 F.3d 1344 (Fed. Cir. 2009) (holding that the government breached contracts). Issues of government liability associated with the Bureau's ESA compliance are beyond the scope of this Article. Suffice it to say that the courts are still determining the relative rights of the government and water users in circumstances where environmental requirements cause reduced deliveries of project water, and that issue remains a contentious one.

²⁹⁰ See Fischman, *supra* note 192, at 513 (noting the "particular challenge" of unifying and coordinating the National Wildlife Refuge system due to "the diverse array of unit establishment mandates" for particular refuges).