

# [***ARTICLE:WATERSHED DOWN?: THE UPS AND DOWNS OF WATERSHED MANAGEMENT IN THE SOUTHWEST***](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:46CJ-K400-00SW-5089-00000-00&context=1516831)

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**Text**

**[\*395]**

[*I*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T2X2-D6RV-H374-00000-00&context=1516831). INTRODUCTION

This article began as a presentation on interjurisdictional watershed management. "Interjurisdictional" is really just verbiage. A watershed, defined by physical rather than political boundaries, rarely falls under the management of a single entity. The land area that drains to a single body of water such as a ***river*** or lake is the watershed itself. [[1]](#footnote-2)1 Also, a few acres may drain to a small stream or wetland while those small streams and wetlands may drain into larger ***rivers***, which in turn drain into estuaries. [[2]](#footnote-3)2 Watershed management, therefore, "uses **[\*396]** hydrologically defined areas (watersheds) to coordinate the management of water resources" as well as "all activities within a landscape that affect watershed health." [[3]](#footnote-4)3 One look at a topographic map of North America can tell you that virtually any comprehensive watershed management is by definition interjurisdictional.

But imagine if it were not. In 1890, John Wesley Powell, then director of the United States Geological Survey, suggested that the federal government organize the western United States into watersheds. Powell drafted a map that divided the lands west of the hundredth meridian into twenty-four ***river*** basins, which were further divided into approximately 150 watershed units. [[4]](#footnote-5)4 Each watershed unit would be a self-governing body. [[5]](#footnote-6)5 As we can see, Congress did not realize Powell's vision, and "desert islands" dot the West. [[6]](#footnote-7)6

Two major ***rivers*** of the American West - the ***Colorado*** and the Rio Grande - are prime examples of the clash between Powell's vision and our reality. The ***Colorado*** ***River*** serves Los Angeles, San Diego, Denver, Salt Lake City and tens of other cities that lie outside of the ***river***'s watershed. [[7]](#footnote-8)7 The ***river*** has even been engineered to direct a portion of its flow to the Rio Grande. Moreover, early compacts divided these ***rivers*** to measure and enforce water deliveries, continually partitioning the basins, [[8]](#footnote-9)8 and leading to the peculiar phenomena of prohibiting water flow within a ***river*** simply because it would move from an upper to a lower basin. [[9]](#footnote-10)9

Renewed emphasis on watershed management faces the challenges left by centuries-old fragmentation of the watershed. [[10]](#footnote-11)10 Since Powell **[\*397]** first drew his map, the lands of the West have been divided among cities, states, and countries rather than connected to streams, lakes, and ***rivers***. The United States has developed separate laws for clean water, clean air, endangered species, irrigated agriculture, and land use management, for implementation at the federal level. [[11]](#footnote-12)11 Each of the western states has developed similar, yet diverse, laws governing the allocation and use of water rights, administration of groundwater resources, and wildlife management. [[12]](#footnote-13)12 Separate agencies administer these laws at federal, state, and tribal levels. [[13]](#footnote-14)13 Each entity has different missions, authorities, and modes of operation.

What we are left with is a patchwork of statutes that recognize jurisdictions of state, federal and tribal agencies regarding countless issues affecting a watershed. Where these authorities overlap, it is often difficult for governmental entities to cooperate and share power among themselves as well as the regulated community. Where issues arise that do not fall squarely within existing structure, it is difficult for these entities to cross political and historical boundaries. Therefore, watershed initiatives must overcome fragmented, incomplete and shared regulatory schemes - existing among and within different levels of government. Because property and political boundaries of countries, states, tribes, counties, and municipalities are largely unrelated to watersheds, stakeholders have found it difficult to coordinate watershed protection and restoration efforts. [[14]](#footnote-15)14

The ***Colorado*** ***River*** and the Rio Grande provide a fascinating case study of the interplay of political boundaries and watersheds in resource management. Both ***rivers***' headwaters are in ***Colorado***, in the Rocky Mountains and San Juan Mountains, respectively, both head south collecting water from tens of tributaries, and both form part of our border with Mexico. Political boundaries have not respected geographic ones, and the contradiction has generated Congressional enactments, Supreme Court decisions, interstate compacts, and international treaties. [[15]](#footnote-16)15 Despite the fact that these ***rivers*** supply water **[\*398]** to two of the fastest growing regions in the world, there has been little ecological coordination between the two countries. Rather than allowing the watersheds to serve as boundaries, the ***rivers*** themselves do, and the international border severs both basins. [[16]](#footnote-17)16 Adding insult to injury, the United States federal government has further scorned the watersheds of the two ***rivers*** by turning the ***Colorado*** ***River*** into a tributary of the Rio Grande, diverting approximately 110,000 acre-feet of water from a Pacific watershed to an Atlantic one, each year. [[17]](#footnote-18)17

This article will first discuss in more detail the multitudinous obligations of federal, state, and tribal entities under the patchwork of laws and jurisdictions currently governing the majority of operations on the Lower ***Colorado*** ***River*** and Middle Rio Grande. The next section will examine several tangible examples of the overlap and gaps created by the exercise of these authorities and the fulfillment of these obligations. The last section will describe existing ***river*** restoration efforts in the two basins and their ability to overcome these obstacles and achieve watershed management and protection.

[*II*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T352-D6RV-H379-00000-00&context=1516831). PATCHWORK OF EXISTING STATUTES AND AUTHORITIES THAT RECOGNIZE JURISDICTIONS OF FEDERAL, TRIBAL, AND STATE AGENCIES.

When dealing with ***river*** basins, the landmark Clean Water Act ("CWA") sets the stage. [[18]](#footnote-19)18 The CWA sets out to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" and establishes national goals to achieve such: the elimination of "the discharge of pollutants into the navigable waters;" the prohibition of "the discharge of toxic pollutants;" and "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." [[19]](#footnote-20)19

In general, the CWA institutes various regulatory structures to achieve these goals. First, the Environmental Protection Agency ("EPA") must set effluent limits based on what is technologically and economically feasible for hundreds of pollutants for categories of dischargers. [[20]](#footnote-21)20 At the same time, states must set ambient water quality **[\*399]** standards for the receiving waters. [[21]](#footnote-22)21 Dischargers must obtain a permit that certifies the discharged pollutant(s) satisfy both the effluent limitations and the water quality standards. [[22]](#footnote-23)22

The process of setting water quality standards is where the watershed itself comes into play. To establish the standards, states must first inventory all state waters and identify those not protected by EPA-set effluent limits. [[23]](#footnote-24)23 State standards divide the waters into segments, determine the present and attainable uses for each segment (endangered species, recreation, domestic use, etc.), and set numeric limits on pollutants that will protect these uses. [[24]](#footnote-25)24

In addition to setting water quality standards, states are required to assign the "total maximum daily load" ("TMDL") for water bodies that do not meet existing water quality standards. [[25]](#footnote-26)25 TMDLs are, in effect, a "pollution budget" among both point and nonpoint sources of pollution. [[26]](#footnote-27)26 The key elements of an EPA regulatory strategy for dealing with the vast number of polluted waterbodies call for identification of polluted waterbodies, of pollutants and their sources, and a quantification of a pollutant load. [[27]](#footnote-28)27 The allocations may require land use controls for nonpoint sources of pollution since technological control of point sources have not satisfied state standards. [[28]](#footnote-29)28 A bill introduced into the Senate in 1994 included a title on watershed planning, in part to address the contentious issue of nonpoint source pollution. [[29]](#footnote-30)29

**[\*400]** In contrast, the Endangered Species Act's role in protecting ecosystems has united stakeholders, resource managers and enforcement agencies in an effort to protect and recover endangered species in a ***river*** basin. While the trigger is usually endangered aquatic species, such efforts to protect the species have the potential to expand their scope to riparian and terrestrial species. [[30]](#footnote-31)30

Congress passed the Endangered Species Act ("ESA") in order to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such [] species." [[31]](#footnote-32)31 The ESA contains procedural and substantive requirements that serve to carry out the conservation and recovery goals of the Act, including the development of recovery plans, the duty to conserve listed species, the duty to avoid jeopardizing listed species via consultation with the Fish and Wildlife Service or National Marine Fisheries Service, and the prohibition on taking listed species. [[32]](#footnote-33)32 In order to trigger these protections, the services must list species as threatened or endangered and designate the critical habitat of that species. [[33]](#footnote-34)33

Once listed, it is illegal for anyone to "take" an endangered or threatened species. [[34]](#footnote-35)34 The federal government has additional obligations: to utilize their authorities and carry out programs for the conservation of listed species, and to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any federally listed species or result in the destruction or adverse modification of designated critical habitat. [[35]](#footnote-36)35 In the event that a federal agency determines that its action "may affect" a listed species or designated critical habitat, the agency is required to consult with the Fish and Wildlife Service regarding the degree of impact and **[\*401]** measures available to avoid or minimize the adverse effects. [[36]](#footnote-37)36

In addition, pursuant to the Fish and Wildlife Coordination Act ("FWCA"), the Fish and Wildlife Service, National Marine Fisheries Service, and state wildlife agencies must review federal water projects that may impound, divert, or otherwise modify a waterbody for the impacts to wildlife "with a view to the conservation of wildlife resources by preventing loss of and damage to such resources." [[37]](#footnote-38)37 While the consultation process under the FWCA may not stop a project, the Act does extend to fish and wildlife not covered by the ESA. [[38]](#footnote-39)38

Naturally, the most encompassing federal obligation originates from the National Environmental Policy Act ("NEPA") - "our basic national charter for protection of the environment." [[39]](#footnote-40)39 Its purpose is to "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man," [[40]](#footnote-41)40 and to "help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore and enhance the environment." [[41]](#footnote-42)41 In one way or another, these watershed efforts will undergo NEPA analyses.

Section 102 of NEPA contains action-forcing provisions, aimed at fulfilling NEPA's intent, that require all federal agencies to prepare an environmental impact statement for "major Federal actions significantly affecting the quality of the human environment," that includes "the environmental impact of the proposed action," "any adverse environmental effects which cannot be avoided," and "alternatives to the proposed action." [[42]](#footnote-43)42 Without these provisions, public participation would be less meaningful. [[43]](#footnote-44)43

Development of alternatives to the proposed action is the heart of the EIS. [[44]](#footnote-45)44 The Council on Environmental Quality ("CEQ") regulations call on federal agencies to "rigorously explore and objectively evaluate all reasonable alternatives, … . devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits[,] … . include the alternative of no action … . [and] include appropriate mitigation measures not already included in the proposed action or alternatives." [[45]](#footnote-46)45

**[\*402]** The environmental consequences section of the EIS "forms the scientific and analytic basis" for the comparison of alternatives. [[46]](#footnote-47)46 This section discusses the direct and indirect effects of the alternatives, the significance of the environmental effects, and the means to mitigate adverse impacts. [[47]](#footnote-48)47 Once an action is considered to have significant impact, mitigation measures must be developed where it is feasible to do so. [[48]](#footnote-49)48

In a discussion of western watersheds, the Reclamation Act may have left a greater legacy than any environmental law. [[49]](#footnote-50)49 Local irrigation interests did not have the capital to build and sustain private irrigation projects; federal resources were required for the widespread irrigation envisioned in the arid west. [[50]](#footnote-51)50 The Reclamation Act hastened settlement and irrigation of the federally owned desert; since then, the Bureau of Reclamation alone has built 133 water projects in the western United States [[51]](#footnote-52)51

Under the Reclamation Act, Congress restricted the use of water delivered by federal projects to that reasonably needed for beneficial use. [[52]](#footnote-53)52 Many states have similar rules, as one court observed:

water is too valuable to be wasted, either through an extravagant application for the purpose appointed or by waste by misapplication which can be avoided by the exercise of a reasonable degree of care to prevent loss, or loss of a volume which is greatly disproportionate to that actually consumed." [[53]](#footnote-54)53

**[\*403]** In addition to this express limitation, federal reclamation projects generally must conform with state water laws, unless doing so would interfere with other federal requirements or interests. [[54]](#footnote-55)54

The CWA, ESA, and NEPA are federal statutes that apply throughout the United States. A report to Congress on the proper federal role in western water management well summarizes the intricacies:

The federal role continues to be fragmented, with multiple agencies, each with specific and narrow legal mandates and constituencies, managing or controlling certain aspects of water uses. For example, Reclamation built and manages specific projects primarily for the benefit of agricultural water users, although this mission has broadened considerably in recent decades. The Corps [of Engineers] manages projects, maintains navigation channels, and operates and maintains reservoirs and levees to control floods and for such incidental uses such as hydroelectric power generation. The Fish and Wildlife Service (Service) and the National Marine Fisheries Service administer the Endangered Species Act (ESA) and the Fish and Wildlife Coordination Act (FWCA) to protect the fish and wildlife whose survival may be jeopardized by a federal activity or where private actions, such as a diversion, threaten to harm the species when water is removed from stream channels. More recently, the Clean Water Act allowed a new federal agency, the Environmental Protection Agency (EPA), to set water quality standards for and control discharges into surface waters, but specifically exempted agricultural return flows as nonpoint sources. [[55]](#footnote-56)55

When one delves into the complexities of a ***river*** system, particularly a western ***river***, these authorities transform to a maze of laws. Each major ***river*** basin will inevitably acquire its own "Law of the ***River***" - the product of decades of litigation and negotiation among these and other parties.

[*III*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T372-8T6X-731R-00000-00&context=1516831). THE LAW OF THE ***COLORADO*** ***RIVER***

The Secretary of the Interior serves as the "Watermaster" for the Lower ***Colorado*** ***River***, the only ***river*** system in the country that has been so federalized. [[56]](#footnote-57)56 The Secretary delegated the responsibility of **[\*404]** operating and maintaining the extensive network of dams, reservoirs, water diversions, levees, canals, and other water control and delivery systems on the ***river*** to the Bureau of Reclamation ("Bureau"). The Bureau's authority and discretion is guided by a body of treaties, Congressional enactments, compacts, and other agreements known as the "The Law of the ***River***." [[57]](#footnote-58)57

Significant components of the Law of the ***River*** include the ***Colorado*** ***River*** Compact of 1922, [[58]](#footnote-59)58 the Boulder Canyon Project Act of 1928, [[59]](#footnote-60)59 the Treaty Respecting the Utilization of Waters of the ***Colorado*** and Tijuana ***Rivers*** and of the Rio Grande of 1944, [[60]](#footnote-61)60 the Supreme Court's decision and subsequent decree in Arizona v. California, [[61]](#footnote-62)61 and the ***Colorado*** ***River*** Basin Project Act. [[62]](#footnote-63)62 Environmental laws, including the ESA, NEPA, and CWA must also be considered part of the Law of the ***River*** due to the substantial obligations they impose on the Bureau of Reclamation. [[63]](#footnote-64)63 South of the border, Mexican federal law is pertinent.

The ***Colorado*** ***River*** Compact of 1922 created the Upper Division (Wyoming, ***Colorado***, New Mexico, and Utah) and the Lower Division (Arizona, Nevada and California), and allocated 7.5 million acre-feet of water each to the Upper and Lower Basins. [[64]](#footnote-65)64 Soon after, Congress **[\*405]** quantified, and the Secretary contracted, the allocations to the Lower Basin states of California, Nevada and Arizona in the Boulder Canyon Project Act ("BCPA"). [[65]](#footnote-66)65 The Water Treaty of 1944 then allocated 1.5 million acre-feet to Mexico, with the prospect of another 200,000 acre-feet to Mexico if the United States determines a surplus exists. [[66]](#footnote-67)66 Later, the Upper ***Colorado*** ***River*** Compact of 1948 allocated percentages of the Upper Basin's 7.5 million acre-feet share to ***Colorado***, Utah, New Mexico, Arizona and Wyoming. [[67]](#footnote-68)67

The Supreme Court approved the States' apportionments and set the priorities for ***Colorado*** ***River*** waters in Arizona v. California. [[68]](#footnote-69)68 Although Congress and the Supreme Court approved the States' apportionments, they amended the ***Colorado*** ***River*** Compact, via the BCPA and Decree respectively, by reestablishing the priorities for ***Colorado*** ***River*** waters. Top priorities include controlling floods, [[69]](#footnote-70)69 improving navigation, and regulating the flow, the secondary priorities are water for irrigation and domestic purposes, and the lowest priority is power generation. [[70]](#footnote-71)70 The Decree enjoins the Secretary to release water in accordance with these priorities. [[71]](#footnote-72)71 The other top priorities, regulating the flow of the ***river*** and improving navigation, are purely within the Secretary's discretion. [[72]](#footnote-73)72

**[\*406]** In the decree, the Court held that the Secretary controls ***Colorado*** ***River*** water in the Lower Basin. [[73]](#footnote-74)73 Congress granted the Secretary "broad power" [[74]](#footnote-75)74 to "make contracts for the distribution of the water." [[75]](#footnote-76)75 Nothing in the BCPA changes the decision that the Secretary's contracts "control the apportionment of water among the States" [[76]](#footnote-77)76 and that the Secretary "is not bound by these sections to follow state law." [[77]](#footnote-78)77

The ***Colorado*** ***River*** Basin Project Act directed the Secretary to adopt "operating criteria" for the long-range operation of ***Colorado*** ***River*** reservoirs in order to comply with and carry out the provisions of the ***Colorado*** ***River*** Compact, the Upper ***Colorado*** ***River*** Basin Compact, and the Water Treaty of 1944. [[78]](#footnote-79)78 Each year, the Bureau of Reclamation consults with the seven basin states, the general public and other interested parties in preparing the Annual Operating Plan ("AOP") for ***Colorado*** ***River*** reservoirs. [[79]](#footnote-80)79 The AOP is developed with "appropriate consideration of the uses of the reservoirs for all purposes, including flood control, ***river*** regulation, beneficial consumptive uses, power production, water quality control, recreation, enhancement of fish and wildlife, and other environmental factors." [[80]](#footnote-81)80 The plan also determines the amount of water available for delivery pursuant to the 1944 U.S. Mexico Water Treaty. [[81]](#footnote-82)81 Finally, the AOP determines whether the reasonable consumptive use requirements of users in the Lower Basin will be met under a "normal," "surplus," or **[\*407]** "shortage" condition. [[82]](#footnote-83)82 While the AOP purports to take fish and wildlife values into account when planning operations, the guidelines do not contain any environmental criteria.

If the Secretary determines that surplus water is available, he may allocate water to the states in excess of their apportionments, pursuant to Article II(b)(2) of the Decree - 50 percent to California, 46 percent to Arizona, and 4 percent to Nevada. [[83]](#footnote-84)83 At the close of its term, the Clinton administration promulgated Interim Surplus Guidelines to establish criteria for determining and allocating surplus waters until 2016. [[84]](#footnote-85)84

In recent years, Congress and the basin states have become more alert to the ecological problems facing the ***Colorado*** ***River***. Water quality concerns in the 1970s led to the ***Colorado*** ***River*** Basin Salinity Control Act [[85]](#footnote-86)85 and environmental and aesthetic concerns in the Grand Canyon led to the Grand Canyon Protection Act of 1992. [[86]](#footnote-87)86 Additionally, efforts to include the ***river***'s delta in United States discussions have increased our understanding of Mexican environmental laws.

To begin, the General Law on Ecological Balance and Environmental Protection is the principle federal environmental law in Mexico and sets forth general principles that guide ecological policies as well as instruments for implementing those policies. [[87]](#footnote-88)87 Most environmental protection functions are the responsibility of one agency, the Secretariat for Environment and Natural Resources (Secretaria de Medio Ambiente y Recursos Naturales or "SEMARNAT"), who implements the Federal Ecology Law. [[88]](#footnote-89)88 The federal government implements matters under this general law by issuing regulations, which are in turn implemented by technical standards, known as Official Mexican Norms. [[89]](#footnote-90)89 Under this process, Mexico has established four levels of protection for sensitive species: endangered, threatened, rare and species under special protection. [[90]](#footnote-91)90 **[\*408]** This norm lists over 2,000 species, including several in the Lower ***Colorado*** ***River*** basin - vaquita, totoaba, razorback sucker, Yuma clapper rail, and desert pupfish. [[91]](#footnote-92)91

Agencies within SEMARNAT include the Comision Nacional del Agua ("CNA") and Instituto Nacional de Ecologia ("INE"). CNA has jurisdiction over water quality, water resources and planning, and administers Mexico's system of water rights and pumping permits. [[92]](#footnote-93)92 CNA is encouraging decentralization of its decisionmaking by participating in local watershed councils called District Water Committees (Comites Hidraulicos). [[93]](#footnote-94)93 INE carries out environmental research and development, evaluates Mexico's environmental policies and implements its natural resource programs. [[94]](#footnote-95)94 INE administers the National System of Protected Natural Areas and is responsible for managing the Biosphere Reserve of the Upper Gulf of California. [[95]](#footnote-96)95 A reflection of his administration's priority on the U.S.-Mexico border, President Fox has created a new executive position for border affairs. [[96]](#footnote-97)96

[*IV*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T3H2-D6RV-H37G-00000-00&context=1516831). THE LAW OF THE RIO GRANDE

The Law of the Rio Grande is quite similar to that of the ***Colorado***; it contains an interstate compact, federal and state laws, and international treaties. It also retains vestiges of indigenous culture and Spanish and Mexican laws and grants. [[97]](#footnote-98)97 Although not addressed **[\*409]** above, but just as applicable, are Indian water rights and trust assets. [[98]](#footnote-99)98 In the Middle Rio Grande, there are approximately eighteen Indian pueblos (Acoma, Cochiti, Isleta, Jemez, Laguna, Nambe, Picuris, Pojoaque, San Felipe, San Ildefonso, San Juan, Sandia, Santa Ana, Santa Clara, Santo Domingo, Tesuque, Taos, Zia), "the Navajo Nation and certain Navajo allottees, and the Jicarilla Apache Nation." [[99]](#footnote-100)99 Annual flow of approximately one million acre-feet engenders a constant balancing of supply and demand; the presence of unquantified, senior water rights threatens to tip the scales. [[100]](#footnote-101)100

Winters v. United States established the "doctrine of reserved rights," which ensures that lands set aside by the federal government have sufficient water for the purposes for which they were set aside. [[101]](#footnote-102)101 The reservation of water dates back to the establishment of the reservation. [[102]](#footnote-103)102 Later, the Supreme Court developed the "practicably irrigable acreage" ("PIA") standard by which to calculate the water rights of a reservation. [[103]](#footnote-104)103 Indian water rights were thus established and to be met from each state's entitlement.

In turn, the United States holds Indian land and resources in trust, with the beneficiary interest residing in the tribe. This fiduciary relationship has imposed a responsibility on the federal government to protect tribal property, treaty rights, and culture, including water rights. [[104]](#footnote-105)104 The trust responsibility imposes "most exacting fiduciary standards" on every federal agency. [[105]](#footnote-106)105 Inevitably, this fiduciary duty **[\*410]** comes into conflict with implementation of other federal statutes and obligations. [[106]](#footnote-107)106

Just as ***Colorado*** ***River*** basin states sought to protect their rights from California's use, downstream users on the Rio Grande, including the governments of Mexico and Texas, sought guaranteed delivery of historic water rights in response to increased withdrawals by ***Colorado*** and New Mexico. The U.S.-Mexico Water Treaty of 1906 obligates the United States to deliver 60,000 acre-feet of water each year to the International Dam at Ciudad Juarez. [[107]](#footnote-108)107 To help fulfill its delivery commitment, the United States built Elephant Butte Dam and Reservoir, the southern boundary of the Middle Rio Grande. [[108]](#footnote-109)108 In 1938, ***Colorado***, New Mexico, and Texas entered into the Rio Grande Compact, again to ensure the delivery of water to downstream users in New Mexico and Texas. [[109]](#footnote-110)109 Each state's share is based on runoff, rather than a set numerical allocation. [[110]](#footnote-111)110

Federal involvement in the Middle Rio Grande began in earnest when it launched the Middle Rio Grande Project. In 1947 and 1948, the Bureau of Reclamation and Army Corps of Engineers prepared the Rio Grande Flood Control Program - detailed studies and a joint proposal for development of federal reclamation and flood and sediment control works on the ***river***. [[111]](#footnote-112)111 The project called for the Bureau to rehabilitate the dam and diversion facilities of the Middle Rio Grande Conservancy District ("District" or "MRGCD"), which had fallen into disrepair, channelize 127 miles of the ***river***, and acquire the District's outstanding debt. [[112]](#footnote-113)112 In return, the District conveyed its property interests in the facilities to the Bureau. [[113]](#footnote-114)113 In 1962, Congress **[\*411]** approved the San Juan-Chama Project, which currently diverts up to 110,000 acre-feet of water from the San Juan ***River*** basin into the Rio Grande. [[114]](#footnote-115)114

The Army Corps of Engineers ("Corps") also has a hand in managing the reservoirs in the Middle Rio Grande. The Corps owns and operates two major and several minor dams and reservoirs on the ***river*** that trap sediment and prevent overbank flooding in the Middle Rio Grande. [[115]](#footnote-116)115 Abiquiu Dam and Reservoir are on the Rio Chama below El Vado Reservoir, thirty-two ***river***-miles upstream from the confluence with the Rio Grande, and were completed in 1963. [[116]](#footnote-117)116 Abiquiu has a storage allocation of nearly 600,000 acre-feet for sediment and flood control, but Congress has authorized up to 200,000 acre-feet for storage of San Juan-Chama or native Rio Grande water. [[117]](#footnote-118)117

The second major Corps facility, Cochiti Dam and Reservoir, located on the mainstem Rio Grande about fifty miles north of Albuquerque, began filling in 1975. [[118]](#footnote-119)118 Cochiti has a storage capacity of over 600,000 acre-feet for sediment and flood control purposes, but has a 50,000 acre-foot "pool" dedicated to recreation and fish and wildlife purposes. [[119]](#footnote-120)119

Other Corps dams and reservoirs that are part of the Middle Rio Grande Project are Jemez Canyon Dam, located on the Jemez ***River*** about 2.8 miles upstream from its confluence with the Rio Grande; Platoro Dam on the Conejos ***River***; and Galisteo Dam on Galisteo Creek. [[120]](#footnote-121)120 The various Flood Control Acts authorized all of these dams for flood control and sediment retention, preventing overbank flooding and sediment deposition.

[*V*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T3X2-8T6X-731X-00000-00&context=1516831). SHARING POWER, CROSSING BOUNDARIES

As we have seen, there are myriad authorities influencing ***river*** management to varying degrees. Domestic and international affairs, federal, state and Indian governments have their own niches. As a result, it is difficult for agencies to cooperate and share power among themselves as well as the regulated community and to cross political boundaries. [[121]](#footnote-122)121

**[\*412]** The most illustrative example is the perceived tension between the United States Departments of Interior and State when dealing with Lower ***Colorado*** ***River*** issues. In the Lower Basin, the Secretary of Interior, through the Bureau of Reclamation, is the "Watermaster," who has a great deal of authority and discretion in the operation of federal facilities. However, United States management of the entire basin has severely degraded the ***Colorado*** ***River*** Delta and Upper Gulf of California. [[122]](#footnote-123)122 The delta once spanned approximately 780,000 hectares of wetlands and riparian areas - nearly the size of Rhode Island. [[123]](#footnote-124)123 In the past century, ***river*** flows into the Delta have been reduced nearly 75 percent; from 1906 to 1921 flows averaged 18.1 million acre-feet, [[124]](#footnote-125)124 but from 1984 to 1999 they averaged 4.2 million acre-feet. [[125]](#footnote-126)125 With the construction of Hoover Dam in 1936, the Delta began to dry up as the ***river*** filled huge reservoirs and was diverted to agricultural and municipal use. [[126]](#footnote-127)126 When Glen Canyon Dam was completed and Lake Powell began filling, forty-five years and over twenty dams later, water rarely made it all the way to the Gulf. [[127]](#footnote-128)127 The delta has shrunk to about 60,000 hectares, but is still a major stopover on the Pacific Flyway and supports numerous species listed by one or both countries as endangered, threatened, or sensitive. [[128]](#footnote-129)128

Despite the Secretary's enormous influence in managing the ***river***, the Water Treaty of 1944 has placed consultation with Mexico regarding these impacts in the domain of the International Boundary and Water Commission ("IBWC"), subject to its different mission and priorities and diplomatic process. [[129]](#footnote-130)129 The IBWC, known as the Comision Internacional de Limites y Aguas ("CILA") in Mexico, is a binational institution with authority over surface waters in the border region and is responsible for carrying out the Water Treaty of 1944. [[130]](#footnote-131)130 **[\*413]** Their scope of work includes boundary maintenance, reclamation projects, allocation of water resources, construction of sanitation works and resolution of treaty and water quality disputes. [[131]](#footnote-132)131

Until recently, IBWC/CILA focused on issues of water supply and quality rather than environmental protection. A look at past treaty minutes and technical reports demonstrates the emphasis on construction, delivery, and water quality. [[132]](#footnote-133)132 In 1997, IBWC established a work group covering studies of the ***Colorado*** ***River*** delta. [[133]](#footnote-134)133 More technical than policy oriented, the objective of the Fourth Work Group is to "perform a joint baseline study of the water and natural resource conditions in the Cienega de Santa Clara and the adjoining lowermost part of the Delta of the ***Colorado*** ***River*** to guide the participating agencies in making recommendations … ." [[134]](#footnote-135)134 The Work Group has several proposals before it, but has yet to act on any. [[135]](#footnote-136)135

Notwithstanding the international diplomacy, it has been the Department of the Interior who has spurred great advances for binational ***Colorado*** ***River*** and Delta restoration. [[136]](#footnote-137)136 The delta issue has gathered momentum over the past decade, with the publication by environmental organizations and scientists of various studies noting the importance of continuous flows to the delta and the likelihood that increasing use in the United States will end these flows. [[137]](#footnote-138)137 The Department, with so many agencies active in the border region, has worked closely with its counterparts in Mexico, signing the Letter of Intent with SEMARNAP, [[138]](#footnote-139)138 the Joint Declaration, [[139]](#footnote-140)139 and other cross- **[\*414]** border initiatives between the FWS and SEMARNAT and INE. [[140]](#footnote-141)140 IBWC, on the other hand, has moved exceedingly slowly in recognizing the delta issue, despite its direct role in implementing the Treaty. [[141]](#footnote-142)141

While attending a meeting held by the Department of the Interior, in follow-up to the Joint Declaration, members of the United States section of the IBWC suggested a "conceptual minute" to the Water Treaty of 1944. [[142]](#footnote-143)142 A conceptual minute does not call for action such as construction or boundary work, but instead calls for cooperative work - in this case, assessing the threats to and restoring the delta. [[143]](#footnote-144)143

On December 12, 2000, the United States and Mexico signed such a minute - an agreement on a framework for **[\*415]** cooperation on studies and recommendations regarding the riparian and estuarine ecology of the Delta. [[144]](#footnote-145)144 Minute 306 recognizes the growing binational collaboration among government authorities and scientific, academic and non-governmental organizations interested in preserving the Delta and Upper Gulf. [[145]](#footnote-146)145 The minute will establish a framework for cooperation between the United States and Mexico, including examining possible approaches to ensure use of water for ecological purposes, and a forum for public participation and exchange of information, and will develop joint studies and recommendations. [[146]](#footnote-147)146

Before Minute 306, the primary obstacle facing Delta restoration was the absence of a binational forum facilitating comprehensive restoration and long-term planning while also empowering nontraditional decisionmakers such as non-governmental organizations and academic institutions. [[147]](#footnote-148)147 Minute 306 was the catalyst for the U.S.-Mexico Binational Symposium on the ***Colorado*** ***River*** Delta. [[148]](#footnote-149)148 Unfortunately, the tragedies of September 11 impeded the participants' full attendance and attention and we wait for the Symposium's proceedings to discuss the next steps. [[149]](#footnote-150)149

Lest the reader think this an extreme example of interagency cooperation, the presence of Indian pueblos and tribes in a ***river*** basin presents a similar dynamic because tribes too are sovereigns. Adding another cook to the kitchen, the Bureau of Indian Affairs ("BIA") represents Indian Trust assets for over thirty-four Indian tribes in the Lower ***Colorado*** ***River*** Basin, as well as approximately twenty tribes and pueblos in the Middle Rio Grande. Even the Department of Interior itself may have conflicting mandates in these situations, where protecting Indian trust assets may conflict with operating Bureau water projects or enforcing the ESA. [[150]](#footnote-151)150

The trust relationship requires the Department of Interior (or any federal agency) to conduct government-to-government consultation with Indian tribes and Pueblos. [[151]](#footnote-152)151 When a federal agency plans to take action that may affect trust assets, including water rights, the agency must consult with the affected tribes and thereafter represent those concerns and rights in the federal government and in environmental and other compliance processes for the action. [[152]](#footnote-153)152

**[\*416]** The difficulties inherent in such an arrangement are manifest when it is the Department of the Interior itself undertaking the action. In the Middle Rio Grande, the FWS is currently involved in ESA litigation involving the endangered silvery minnow and southwestern willow flycatcher. [[153]](#footnote-154)153 Early in 2001, therefore, FWS quickly issued a biological opinion on the impacts of federal and nonfederal activities on these species in the Middle Rio Grande. Before issuance of the biological opinion, the Fish and Wildlife Service must consult with Indian governments.

After the government-to-government consultation, the Department must reconcile the duty of the FWS to enforce the ESA for the conservation of the silvery minnow and southwestern willow flycatcher, with the duty of the FWS as manager of national wildlife refuges in the Middle Rio Grande, with the duty of the BIA as trustee for the Indian trust assets, and with the duty of the Bureau of Reclamation to comply with the ESA. [[154]](#footnote-155)154 Given a short timeline and numerous tribal governments, the FWS cannot always accomplish this successfully.

On the state level, water resources departments, fish and game departments, environment departments and ***river*** commissions are very heavily invested in ***river*** management. Of course, irrigation districts have long-standing interests since they hold significant water rights and contracts. [[155]](#footnote-156)155 With the advent of federal environmental laws, new stakeholders are demanding input into decisionmaking. Here too, the state-federal nexus often generates conflict, where state and local interests often resent enforcement of federal laws, regarding them as unfunded federal mandates and impositions on states' rights. [[156]](#footnote-157)156

For example, in the Middle Rio Grande, there is extensive information showing that the Middle Rio Grande Conservancy District's ("MRGCD") water diversions are wasteful, far beyond any reasonable beneficial use under both federal and state law. [[157]](#footnote-158)157 MRGCD received a state permit in the 1920s which has since expired. [[158]](#footnote-159)158 The District has not applied for permanent water rights - called a "proof of beneficial use" - to detail how much land is irrigated and with how **[\*417]** much water. [[159]](#footnote-160)159 The State and Bureau have MRGCD reports showing diversions averaging 609,000 acre-feet per year for 53,685 acres - more than 11 acre-feet per acre. [[160]](#footnote-161)160 This amount is double other irrigators in New Mexico. [[161]](#footnote-162)161 The State Engineer has announced that these diversions are excessive and that he expects an efficiency of greater than 22 percent. New Mexico will only allow consumption of 2.1 acre-feet per acre, a reduction of over one-third. [[162]](#footnote-163)162

By exceeding any reasonable beneficial use requirement, MRGCD's diversions are thus unlawful under both federal and state law. Yet MRGCD has not reduced its demand for water deliveries from federal reservoirs, the Bureau still delivers all water MRGCD calls for, and the State Engineer has not enforced beneficial use requirement via a Proof of Beneficial Use ("PBU"). As long as neither the state nor the federal government exercises its authority, the ***river*** suffers from lack of certainty and inability to move forward.

Inertia can also set in when no entity has clear authority for a necessary or proposed action. Instream flows, a challenge to obtain and enforce in even the smallest stream, are nearly impossible to discuss in the context of an international ***river***. In the Lower ***Colorado*** ***River*** basin, the Delta has received water in recent years largely due to luck; this will end unless legal mechanisms are created to ensure continued flows. [[163]](#footnote-164)163 The concept of instream flow rights has been recognized by most western states and federally established with such conservation laws as the Wild Scenic ***Rivers*** Act of 1968, [[164]](#footnote-165)164 Grand Canyon Protection Act of 1992 [[165]](#footnote-166)165 and the Central Valley Project Improvement Act. [[166]](#footnote-167)166 The Upper Basin of the ***Colorado*** ***River*** has provided for minimum streamflows in a recovery program for endangered fish. [[167]](#footnote-168)167 Before we can extend these concepts internationally to our neighbors in Mexico, we must first overcome the **[\*418]** obstacles of the Law of the ***River***. Two challenges are apparent: the ability to transfer water from the Upper Basin to the Lower Basin, and from the Lower Basin to Mexico. State and federal entities in both basins believe these challenges are actually impossibilities. [[168]](#footnote-169)168

[*VI*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T4F2-D6RV-H37N-00000-00&context=1516831). FACING THE VOID

These are just some of the conflicts in each region. How do basinwide projects deal with them? Watershed protection efforts must continually face fragmented, incomplete and shared regulatory schemes.

Current watershed or basin initiatives generally fall under the auspices of federal environmental statutes. Examples are the Lower ***Colorado*** ***River*** Multi-Species Conservation Program ("LCR MSCP") and the Middle Rio Grande ESA Collaborative Program ("Program"). However, these programs arose out of crisis and exist solely to resolve it - in these cases, ESA compliance. As a consequence, the scope and coverage of these programs fail to encompass the problem watershed. For example, the Middle Rio Grande ESA Collaborative Program initially covered only that stretch of the Rio Grande where the endangered silvery minnow still survives - from Cochiti Dam to Elephant Butte Reservoir. [[169]](#footnote-170)169 This stretch of ***river*** is only 5 percent of the minnow's current habitat. [[170]](#footnote-171)170 It is not a complete watershed effort because it lacks actions that will address additional endangered species in the region. On the other hand, the LCR MSCP covers nearly 100 endangered and sensitive species, but has limited its geographic scope to the United States portion of the ***river***. [[171]](#footnote-172)171 Despite the limited purpose and scope of these programs, they still have difficulty overcoming the obstacles of a fragmented and overlapping regulatory framework.

The Lower ***Colorado*** ***River*** Multi-Species Conservation Program **[\*419]** was formed in 1995 in response to the critical habitat designation for the ***Colorado*** pikeminnow, razorback sucker, bonytail, and humpback chub in 1994 [[172]](#footnote-173)172 and the listing of the southwestern willow flycatcher as endangered in 1995. [[173]](#footnote-174)173 The Bureau of Reclamation and the lower ***Colorado*** ***River*** Basin states of California, Arizona, and Nevada began negotiations over the development of a conservation plan and incidental take permit application to obtain regulatory certainty for continuing dam operations and water diversions. The Department of Interior and Lower Basin states formalized their partnership with a Memorandum of Agreement ("MOA") on August 2, 1995. [[174]](#footnote-175)174 The intent of the MOA was to provide interim regulatory assurance during a three-year program development period and long-term assurance with the end conservation program, the MSCP. [[175]](#footnote-176)175 Instead of consulting with FWS, who would develop a reasonable and prudent alternative ("RPA") to the agency's actions, (so that the Bureau could ensure its activities did not jeopardize listed species), the signatories designed the MOA to serve as the RPA, thereby postponing ESA section 7 consultation. [[176]](#footnote-177)176 Conservationists threatened to sue the federal agencies if the Bureau did not begin consultations with FWS as the ESA required. [[177]](#footnote-178)177 In response, the federal and state agencies issued a Memorandum of Clarification ("MOC") that ostensibly recognized that the agencies participating in the MSCP could not avoid the legal requirements of the ESA. [[178]](#footnote-179)178

The LCR MSCP is a partnership of state, federal, tribal, and other public and private stakeholders with an interest in managing the water and related resources of the Lower ***Colorado*** ***River*** Basin. The purposes of the LCR MSCP are to:

(1) conserve habitat and work toward the recovery of threatened and endangered species as well as reduce the likelihood of additional species listings under the Federal Endangered Species Act … , (2) accommodate current water diversions and power production and optimize opportunities for future water and power development … , and (3) provide the basis for take authorization pursuant to **[\*420]** ESA … . [[179]](#footnote-180)179

The overarching goal of the LCR MSCP is to provide long-term compliance with the ESA for federal and non-federal entities for the next fifty years. [[180]](#footnote-181)180

There is, however, no representation of environmental and Mexican interests because of the limited geographic scope. Despite this, the MSCP is widely touted as an ecosystem approach to conservation planning. [[181]](#footnote-182)181 In late 1998, the Bureau of Reclamation had supported a proposal to fund a study of conservation needs and opportunities of the basin south of the Southern International Boundary ("SIB") with Mexico. [[182]](#footnote-183)182 The MSCP Steering Committee, however, refused to agree to this proposal and instead limited the geographic scope of the MSCP planning area to the ***river*** corridor from Glen Canyon Dam to the SIB and restricted its binational involvement to receiving progress reports on the Bureau's work in Mexico. [[183]](#footnote-184)183 Conservationists felt that the MSCP's continued refusal to adopt a conservation strategy that followed ecosystem boundaries, in favor of a plan that left the status of Mexico and the delta in limbo, would doom the effort to failure. [[184]](#footnote-185)184 As a result, the last conservationists on the MSCP steering committee, the Center for Biological Diversity and Defenders of Wildlife, withdrew from the process. [[185]](#footnote-186)185

Although the MSCP Steering Committee may have intended to limit the scope of the MSCP in order to concentrate their efforts and funds on a manageable project, the effect might be to compromise the final product. For example, withdrawal of all four environmental groups from the committee has raised questions about the adequacy of representation and public participation in the MSCP. More recently, questions have arisen regarding the MSCP's reliability, particularly over the long-term, given that environmental impacts in Mexico have not been addressed.

For example, after seeing that the MSCP would not effect, but **[\*421]** could instead foreclose protection and restoration of the ***Colorado*** ***River*** Delta, four non-governmental organizations from the United States and four from Mexico challenged the adequacy of the ESA consultation over the Bureau of Reclamation's operations and maintenance of dams, reservoirs and water diversions along the Lower ***Colorado*** ***River***. [[186]](#footnote-187)186 The consultation did not fully consider the adverse impacts to listed species that have some or all of their habitat in Mexico, either in the Delta and/or Gulf of California. By excluding species such as the totoaba, vaquita, Yuma clapper rail and southwestern willow flycatcher from the consultation, [[187]](#footnote-188)187 the Bureau has hastened the demise of several endangered species. Whatever the outcome of this litigation, it will have a profound effect on the scope of future ESA consultations, and particularly the LCR MSCP, which is still in development.

In addition to the outstanding issues of the Defenders of Wildlife litigation, binational implementation of Minute 306 also implicates the LCR MSCP. Not only are the two processes quite separate, but also they are likely to remain so, given the inability (thus far) for the Departments of State and Interior to reach a reciprocal working relationship. Furthermore, the divergence of the two processes will put one to the disadvantage of the other. The MSCP aims to lock in ***river*** operation and management, and accompanying mitigation measures, for the next fifty years. Non-federal entities in particular will rely on the "no surprises" policy, which provides assurances to a permit holder that no additional land use restrictions or compensation will be required even if unforeseen circumstances indicate that additional mitigation is required. [[188]](#footnote-189)188 As a result, MSCP members will resist any additional mitigation requested via Minute 306.

On the other hand, in the interests of international diplomacy, the Department of State, in one, five or twenty years, could impose a bilateral agreement or new Treaty minute on United States interests. [[189]](#footnote-190)189 In January 2000, the government of Mexico delivered a demarche, accompanied by a diplomatic note, in which Mexico officially objected to the adoption of the Interim Surplus Guidelines ("ISG") because it **[\*422]** did not take into account or mitigate for the transboundary impacts Mexico warned of, asked for postponement of the ISG to allow time for bilateral consultations, and invited the United States government to initiate diplomatic negotiations on the matter in order to prevent any adverse transboundary impacts. [[190]](#footnote-191)190 Mexico is also reported to have filed an objection to the United States lining of the All-American Canal, which will prevent seepage that currently recharges an aquifer pumped by Mexicali Valley farmers. [[191]](#footnote-192)191 The United States took eleven months to respond to the demarche, and the Secretariat of SEMARNAT, Victor Lichtinger, has stated that he is concerned about the current method of allocating waters between the United States and Mexico and that a primary issue of his agency will be to deal with water supply and quality issues in Mexico. [[192]](#footnote-193)192

[*Second*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T352-D6RV-H379-00000-00&context=1516831), addressing the question of international instream flows is made more difficult by the separation of these two processes. In November of 1999, more than thirty-five non-governmental organizations from Mexico and the United States sent a letter to both governments urging them to establish international instream, perennial flow rights in the ***Colorado*** ***River*** from the United States into Mexico's ***Colorado*** ***River*** Delta and Upper Gulf of California, and describing the treaties, laws and agreements relevant to doing so. [[193]](#footnote-194)193 Establishing instream flow rights would require the United States to deliver water to the border specifically for conservation purposes as well as a joint commitment from Mexico to use this water for the ecosystem. [[194]](#footnote-195)194 The Minute 306 process, without the LCR MSCP, will have difficulty securing a source(s) for instream flows and a mechanism for protecting that flow while instream. Therefore, recent attempts to inject the idea or the principle into ***river*** management have had to go through existing channels, and have been rebuffed. [[195]](#footnote-196)195 **[\*423]** It remains to be seen how successful independent efforts are. [[196]](#footnote-197)196

A. Middle Rio Grande

The Middle Rio Grande Endangered Species Act Collaborative Program ("Program") has roots similar to those of the LCR MSCP. Through 1999, an informal group of federal, state, and environmental representatives had been meeting to exchange information and discuss ways of improving the ***river***'s environmental health. That year also saw the designation of critical habitat for the silvery minnow, [[197]](#footnote-198)197 severe minnow populations losses, [[198]](#footnote-199)198 the suppression of an adverse biological opinion on the Middle Rio Grande, [[199]](#footnote-200)199 and the subsequent filing of a complaint challenging the failure of the federal agencies to complete ESA consultation. [[200]](#footnote-201)200 Realizing that all parties needed to take a step forward with meaningful, coordinated action to save the minnow, stakeholders from the federal, state, and city governments, the MRGCD, and the environmental community inked a Memorandum of Understanding establishing the Program. [[201]](#footnote-202)201 The purpose of the Program is to protect and improve the status of endangered species, "while existing and future water uses are protected." [[202]](#footnote-203)202

The Program is still a work in progress, and of several issues remaining, two have been alluded to already: tribal participation and commitments for water. First, although no tribes or pueblos are signatories to the MOU, representatives have attended several Program meetings and have provided valuable input. However, recent events may have strained the relationship between the Program and **[\*424]** pueblos and tribes. During the fiscal year 2001 appropriations cycle, the Senate made clear that future funding requests would have to come through one collaborative group. [[203]](#footnote-204)203 Several parties interpreted this as an ultimatum for tribal sovereigns (as well as other entities) to become Program participants, or risk future funding for ***river*** restoration initiatives.

This ultimatum relates to a more encompassing tension - perception that absence of tribal signatories hinders the Program's progress. In addition to the underlying question of various parties' commitments, there is a misconception that the need for government-to-government consultation between the Indian governments and the federal government is a barrier to the Program process. [[204]](#footnote-205)204 This can hardly be true, since the Program still must settle critical substantive issues and undergo NEPA and ESA compliance, among other things. In addition, the consultation on the June 2001 biological opinion was rushed, and not performed to the satisfaction of the pueblos. [[205]](#footnote-206)205 The Department of the Interior would like to, and needs to, do a better job this time. [[206]](#footnote-207)206 In the meantime, the process of requesting and funneling money for ESA and restoration projects through the Program, with the involvement of tribal entities, continues to break new ground, and hopefully, forge better relationships. [[207]](#footnote-208)207

A second outstanding issue imperiling the Program's success is the lack of commitment to securing water for the minnow. The lack of quantification or proof of beneficial use by MRGCD, coupled with allegations of wasteful water use, have targeted MRGCD as a logical source of supplemental water. Because the Bureau and Corps manage the ***river*** to supply the MRGCD, they too are under the microscope. A crucial issue in the ongoing Rio Grande Silvery Minnow litigation is the extent of federal control over the facilities (reservoirs, dams, etc.) in the Middle Rio Grande, and the corresponding ability to use that control for the benefit of endangered species. [[208]](#footnote-209)208 Therefore, a program **[\*425]** whose purposes are not only to protect imperiled species, but also to recover these species, allows the Rio Grande to go dry - a serious threat to silvery minnows. [[209]](#footnote-210)209 It is the hope of environmental representatives that before the Program is finalized, there will be firm commitments to supply water to the ***river*** to prevent its going dry.

[*VII*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T4S2-D6RV-H37V-00000-00&context=1516831). CONCLUSION

Even though these groups were formed to address one problem, they still have difficulty overcoming the obstacles of a fragmented and overlapping regulatory framework. Furthermore, and ironically, the self-imposed, limited scopes of both programs are poised to cause the delay that the participants had originally hoped to avoid. Challenges like those of Indian water rights, the ***Colorado*** ***River*** delta, and the definition and proof of beneficial use will require commitment by all stakeholders in the ***river*** basin. If we are to learn anything from the Law of the ***River***(s), it is that there is no "permanent and definitive solution" [[210]](#footnote-211)210 when difficult questions are not addressed.

Put simply, the mere presence of these efforts, whether in response to, or in anticipation of, a crisis is a start. Although problems such as sufficient funding and equitable decisionmaking remain, [[211]](#footnote-212)211 increased interaction and openness will better frame the issues and solutions to reach a broader spectrum of concerns and achieve lasting, though not likely permanent, accord.

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**End of Document**

1. 1 This has become the popular definition, as the U.S.G.S. defines watershed as

   The divide separating one drainage basin from another and in the past has been generally used to convey this meaning. However, over the years, use of the term to signify drainage basin or catchment area has come to predominate, although drainage basin is preferred … . Used alone, the term "watershed" is ambiguous and should not be used unless the intended meaning is made clear.

   W.B. Langbein & Kathleen T. Iseri, General Introduction and Hydrologic Definitions, Geological Survey Water-Supply Paper 154-A (1995), available at [*http://water.usgs.gov/wsc/glossary.html*](http://water.usgs.gov/wsc/glossary.html). This article will refer to basin - "A part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water" - interchangeably with watershed. Id. [↑](#footnote-ref-2)
2. 2 See Environmental Protection Agency, Protecting and Restoring America's Watersheds: Status, Trends, and Initiatives in Watershed Management 9 (2001), available at [*http://www.epa.gov/owow/protecting/*](http://www.epa.gov/owow/protecting/). [↑](#footnote-ref-3)
3. 3 Id. at 10. [↑](#footnote-ref-4)
4. 4 Alex Philp, John Wesley Powell's Watershed Commonwealths: Mapping a West that Might Have Been, Cascadia Planet, (1998) (citing United States Geological Survey, Arid Region of the United States, Showing Drainage Districts, Pl., LXIX, Eleventh Annual Report, 1889-1890, Part II, Irrigation (1891), available at [*http://www.tnews.com/text/powell*](http://www.tnews.com/text/powell) story.html. [↑](#footnote-ref-5)
5. 5 Id. [↑](#footnote-ref-6)
6. 6 See Todd Wilkinson, Roman Aquaducts of New West: Water Pipes, Christian Sci. Monitor, May 3, 2001. [↑](#footnote-ref-7)
7. 7 See Milton N. Nathanson, Updating the Hoover Dam Documents 1 (1978) (population of 2.5 million within the basin, but twelve million receive some portion of their water supply from the ***Colorado*** ***River***). [↑](#footnote-ref-8)
8. 8 The ***Colorado*** ***River*** is divided at Lee Ferry into an Upper and Lower Basin, not inclusive of Mexico. ***Colorado*** ***River*** Compact, 123 ***Colo.*** Sess. Laws 684, [***Colo.*** *Rev. Stat. 37-61-101*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J33S-00000-00&context=1516831) to 104 (2001). The Rio Grande is commonly divided into four reaches: Upper Rio Grande (within ***Colorado***); Middle Rio Grande (***Colorado***/New Mexico state line to Elephant Butte Reservoir); Paso del Norte (Elephant Butte to Presidio Dam, "the Forgotten Reach"); and Lower Basin (Presidio to Gulf of Mexico). William A. Paddock, The Rio Grande Compact of 1938, [*5 U. Denv. Water L. Rev. 1, 4-10 (2001).*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:459P-SCT0-00SW-5050-00000-00&context=1516831) [↑](#footnote-ref-9)
9. 9 See David J. Guy, When the Law Dulls the Edge of Chance: Transferring Upper Basin Water to the Lower ***Colorado*** ***River*** Basin, 1991 Utah L. Rev. 25 (1991). [↑](#footnote-ref-10)
10. 10 See generally A. Dan Tarlock, Putting ***Rivers*** Back in the Landscape: The Revival of Watershed Management in the United States, 6 Hastings W.-Nw. J. Envtl. L. & Pol'y 167 (2000). [↑](#footnote-ref-11)
11. 11 See, e.g., Fish and Wildlife Coordination Act, [*16 U.S.C. 661*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8VJ8-TRY2-D6RV-H527-00000-00&context=1516831) (2000); Endangered Species Act, [*16 U.S.C. 1531*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-707Y-00000-00&context=1516831) (2000); Clean Water Act, [*33 U.S.C. 1251*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0FN2-D6RV-H3DC-00000-00&context=1516831)-1387 (1994); Clean Air Act, [*42 U.S.C. 7401*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SHT-0722-D6RV-H47F-00000-00&context=1516831)-7671 (1994). Land use management also encompasses the watershed concept, see Multiple Use-Sustained Yield Act, [*16 U.S.C. 528*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S7X-DBF2-D6RV-H2P9-00000-00&context=1516831) (2000); National Forest Management Act, [*16 U.S.C. 1600*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-708J-00000-00&context=1516831) (2000); Federal Land Policy and Management Act, [*43 U.S.C. 1701*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-74JK-00000-00&context=1516831)-1785 (1994) (commanding the Forest Service, [*16 U.S.C. 1604*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-708P-00000-00&context=1516831)(e), (g)(3), and Bureau of Land Management, [*43 U.S.C. 1702*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-74JM-00000-00&context=1516831)(c) to consider the watershed in its land use plans and multiple use decisions). [↑](#footnote-ref-12)
12. 12 See generally United States Department of Interior, The Nature Conservancy, Preserving Our Natural Heritage, Volume II State Activities (1978). [↑](#footnote-ref-13)
13. 13 Several statutes provide that qualifying Tribes be treated as states in implementing parts of the Clean Water Act, [*33 U.S.C. 1377*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0FN2-D6RV-H3J5-00000-00&context=1516831)(e); Safe Drinking Water Act, [*42 U.S.C. 300h*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SHT-0712-D6RV-H2CM-00000-00&context=1516831)-l(e); Clean Air Act, [*42 U.S.C. 7474*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SHT-0722-D6RV-H48V-00000-00&context=1516831)(e). [↑](#footnote-ref-14)
14. 14 For a discussion on whether watershed initiatives are practicable or preferable, see Robert W. Adler, Addressing the Barriers to Watershed Protection, [*25 Envtl. L. 973 (1995);*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:3S3V-2V50-00CW-B28W-00000-00&context=1516831) see also Betsy Rieke & Doug Kenney, Resource Management at the Watershed Level (1997). [↑](#footnote-ref-15)
15. 15 Both ***rivers*** live and die according to each's "Law of the ***River***." The Law of the ***Colorado*** ***River*** is the subject of lawsuits as well as novels. See, e.g., Marc Reisner, Cadillac Desert (1993) (general history of federal, state, and private water development). [↑](#footnote-ref-16)
16. 16 See Multi-Species Conservation Program (MSCP) for the Lower ***Colorado*** ***River***, Arizona, Nevada and California, [*64 Fed. Reg. 27,000, 27,001*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3WGX-YXN0-006W-82RT-00000-00&context=1516831) (May 18, 1999) (calling the MSCP a "comprehensive conservation approach" for the Lower Basin, to the Southerly International Boundary). [↑](#footnote-ref-17)
17. 17 See Charles F. Wilkinson, Crossing the Next Meridian, Land, Water and the Future of the West 222 (1992). The waters of the Navajo, Little Navajo and Blanco ***Rivers***, which would flow west into the San Juan and then into the ***Colorado***, are sent instead into the Azotea Tunnel and transported across the Continental Divide to Azotea Creek, a tributary of the Rio Chama in the Rio Grande watershed, which drains into the Gulf of Mexico. Id. [↑](#footnote-ref-18)
18. 18 [*33 U.S.C. 1251*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0FN2-D6RV-H3DC-00000-00&context=1516831)-1387 (1994). [↑](#footnote-ref-19)
19. 19 Id. 1251(a). [↑](#footnote-ref-20)
20. 20 Id. 1311. [↑](#footnote-ref-21)
21. 21 Id. 1313. If state law is absent or insufficient, the EPA will promulgate water quality standards. Id. 1313(a)(3)(C). [↑](#footnote-ref-22)
22. 22 The EPA, or a state, if delegated federal permitting authority through an acceptable program, may issue "a permit for the discharge of any pollutant." Id. 1342(a)(1). A tribe may also issue discharge permits. Id. 1377(e). Furthermore, if existing water quality is better than state water quality standards, discharges may not be permitted if they degrade the water to meet the standards - the antidegradation requirement. Id. 1313(d)(4)(B). [↑](#footnote-ref-23)
23. 23 Id. 1313(d)(1)(A). [↑](#footnote-ref-24)
24. 24 [*40 C.F.R. 131.2 (2001)*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:6094-S111-DYB7-W4P6-00000-00&context=1516831). [↑](#footnote-ref-25)
25. 25 [*33 U.S.C. 1313*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0FN2-D6RV-H3GG-00000-00&context=1516831)(d)(1)(C) (1994). [↑](#footnote-ref-26)
26. 26 United States Environmental Protection Agency, Office of Water, Final TMDL Rule: Fulfilling the Goals of the Clean Water Act, at [*http://www.epa.gov/owow/tmdl/finalrule/factsheet1.html*](http://www.epa.gov/owow/tmdl/finalrule/factsheet1.html). The fact sheet also notes that over 20,000 waterbodies in the United States have been identified as polluted, including 300,000 ***river*** and shoreline miles and five million acres of lakes. [↑](#footnote-ref-27)
27. 27 See Revisions to the Water Quality Planning and Management Regulation and Revisions to the National Pollutant Discharge Elimination System Program in Support of Revisions to Water Quality Planning and Management Regulation, [*65 Fed. Reg. 43,586*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:40PX-7FS0-006W-81WY-00000-00&context=1516831) (July 13, 2000). However, this rule acknowledged the EPA's inability to implement the TMDL rule until October 31, 2001, [*id. at 43,660,*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:40PX-7FS0-006W-81WY-00000-00&context=1516831) and has since postponed implementation until April 30, 2003. Effective Date of Revision to the Water Quality Planning and Management Regulation, [*66 Fed. Reg. 53,044*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:447D-J380-006W-81XJ-00000-00&context=1516831) (Oct. 18, 2001). [↑](#footnote-ref-28)
28. 28 See generally Oliver A. Houck, The Clean Water Act TMDL Program: Law, Policy, and Implementation, 32 Envtl. L. Rptr. 10,358 (2002). [↑](#footnote-ref-29)
29. 29 S. 2093, 103d Cong. (1994). As of this writing, the Bush administration and EPA announced a request of $ 21 million for fiscal year 2003 for watershed protection for the same purposes. John Heilprin, EPA Plans Watershed Protection Program, Wash. Post, Jan. 28, 2002, at A19. [↑](#footnote-ref-30)
30. 30 For more detail, see infra note 180 and accompanying text (discussing the initial impetus behind the Lower ***Colorado*** ***River*** Multi-Species Conservation Program and its eventual scope). [↑](#footnote-ref-31)
31. 31 [*16 U.S.C. 1531*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-707Y-00000-00&context=1516831)(b) (2000) (emphasis added). [↑](#footnote-ref-32)
32. 32 Id. 1533(f) (recovery plans), 1536(a)(1) (duty to conserve), 1536(a)(2) (duty to consult), 1538 (taking). [↑](#footnote-ref-33)
33. 33 See id. 1533(a). An endangered species is defined as "any species which is in danger of extinction throughout all or a significant portion of its range." Id. 1532(6). While the Act requires designation of critical habitat to occur concurrently with listing, this rarely occurs. In fact, the Service often designates critical habitat only after a court decision mandating such. See Defenders of Wildlife, Conservation in Action: Safeguarding Citizen Rights Under the Endangered Species Act (2001). [↑](#footnote-ref-34)
34. 34 [*16 U.S.C. 1538*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-7087-00000-00&context=1516831)(a)(1)(B); ***50 C.F.R. 17.21(a)***, (c), 17.31 (2001). The term "take" is broadly defined to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or … attempt to engage in any such conduct." [*16 U.S.C. 1532*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-7080-00000-00&context=1516831)(19). The FWS has further defined "harm" to include "significant habitat modification or degradation where it actually kills or injures wildlife" and "harass" to include activities that disrupt normal behavioral patterns, including but not limited to, breeding, feeding or sheltering. ***50 C.F.R. 17.3***. [↑](#footnote-ref-35)
35. 35 [*16 U.S.C. 1536*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-7084-00000-00&context=1516831)(a)(1)-(2). "Jeopardize the continued existence of [a species] means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." ***50 C.F.R. 402.02***. [↑](#footnote-ref-36)
36. 36 See [*16 U.S.C. 1536*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-7084-00000-00&context=1516831)(a)-(b). [↑](#footnote-ref-37)
37. 37 Id. 662(a). [↑](#footnote-ref-38)
38. 38 See id. 661 (declaring a purpose of the Act to provide "that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs … ."). [↑](#footnote-ref-39)
39. 39 [*40 C.F.R. 1500.1(a) (2001)*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:60NM-VBX3-CH1B-T068-00000-00&context=1516831). [↑](#footnote-ref-40)
40. 40 [*42 U.S.C. 4321*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SHT-0722-D6RV-H24F-00000-00&context=1516831) (1994). [↑](#footnote-ref-41)
41. 41 [*40 C.F.R. 1500.1(c)*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:60NM-VBX3-CH1B-T068-00000-00&context=1516831). [↑](#footnote-ref-42)
42. 42 [*42 U.S.C. 4332*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:68DB-9963-GXF6-80PF-00000-00&context=1516831)(C). [↑](#footnote-ref-43)
43. 43 See [*Weinberger v. Catholic Action of Hawaii/Peace Educ. Project, 454 U.S. 139, 143 (1981)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-6080-003B-S30H-00000-00&context=1516831) (NEPA fully informs the public of environmental effects and facilitates public input into the decision-making process). [↑](#footnote-ref-44)
44. 44 [*40 C.F.R. 1502.14*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:60NT-G8B3-GXJ9-30TB-00000-00&context=1516831). [↑](#footnote-ref-45)
45. 45 Id. 1502.14. [↑](#footnote-ref-46)
46. 46 Id. 1502.16. [↑](#footnote-ref-47)
47. 47 Id. Direct effects are caused by the action and occur at the same time and place, indirect effects are"

    Caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

    Id. 1508.8. [↑](#footnote-ref-48)
48. 48 Id. 1502.14(f), 1502.16(h), 1508.14. [↑](#footnote-ref-49)
49. 49 Reclamation Act of 1902, ch. 1093, [*32 Stat. 388*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5C8C-P740-01XN-S2TW-00000-00&context=1516831) (codified as amended at [*43 U.S.C. 331*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-7331-00000-00&context=1516831)-616 (1994)) (establishing the purpose of Bureau of Reclamation to construct and operate irrigation facilities in the sixteen arid western states). [↑](#footnote-ref-50)
50. 50 The All-American Canal in southern California is a prime example. As the ***Colorado*** ***River*** continually silted up the canal and eventually flooded the entire works, farmers cried out for a canal built entirely in the United States that could withstand the wildly varying flows and courses of the ***Colorado***, but this could not be done without an upstream dam (eventually Hoover Dam). See Imperial Irrigation District, How it Works, The Imperial Dam, at [*http://www.iid.com/water/works-imperialdam.html*](http://www.iid.com/water/works-imperialdam.html). [↑](#footnote-ref-51)
51. 51 Western Water Policy Review Advisory Commission, Water in the West: Challenge for the Next Century 4-3 (1998), available at [*http://www.den.doi.gov/wwprac/reports.htm*](http://www.den.doi.gov/wwprac/reports.htm). [↑](#footnote-ref-52)
52. 52 [*43 U.S.C. 372*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-7345-00000-00&context=1516831) (1994) (beneficial use is the basis, measure, and limit of water use under the Reclamation Act); see also N.M. Const., art. XVI, 3; [*Jicarilla Apache Tribe v. United States, 657 F.2d 1126, 1133-34 (10th Cir. 1981).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-0BM0-0039-W058-00000-00&context=1516831) [↑](#footnote-ref-53)
53. 53 [*Jicarilla Apache Tribe, 657 F.2d at 1134*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-0BM0-0039-W058-00000-00&context=1516831) (citations omitted); see also [*Imperial Irrigation Dist. v. State Water Res. Control Bd., 275 Cal. Rptr. 250, 255 (Cal. Ct. App. 1991)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3RX6-HHM0-003D-J1NM-00000-00&context=1516831) (estimates of water loss by the district's system ranged from 53,000 to 135,000 acre-feet per year through "canal spill" and 312,000 to 559,000 acre-feet per year through excessive "tailwater"); [*Erickson v. Queen Valley Ranch* ***Co****., 99 Cal. Rptr. 446, 450 (Cal. Ct. App. 1971)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3RRS-8W30-003C-J2HV-00000-00&context=1516831) (finding five-sixths of flow of water lost in delivery via earthen ditch inefficient and wasteful and therefore not beneficial use even though it was consistent with local custom); [*Doherty v. Pratt, 124 P. 574, 576 (Nev. 1912)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3XV7-KKR0-00KR-D2SH-00000-00&context=1516831) (allowing two-thirds of the water diverted to become lost in a swamp is not a reasonable and economical method of diversion). [↑](#footnote-ref-54)
54. 54 [*43 U.S.C. 383*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-7355-00000-00&context=1516831) (1994); [*California v. United States, 438 U.S. 645 (1978);*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-8P40-003B-S193-00000-00&context=1516831) [*Arizona v. California, 373 U.S. 546, 589 (1963);*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [*Ivanhoe Irrigation Dist. v. McCracken, 357 U.S. 275, 291 (1958).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-J2V0-003B-S01T-00000-00&context=1516831) [↑](#footnote-ref-55)
55. 55 Western Water Policy Review Advisory Commission, supra note 51, at 4-3 to 4-6; see also id. at 4-4 to 4-5 for a table of Major Federal Laws and Actions Affecting Western Water Resources. [↑](#footnote-ref-56)
56. 56 Historically, the basin states have feared California's rapid water consumption. [*Arizona v. California, 373 U.S. 546, 555 (1963).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) For most of the twentieth century, only California was able to acquire water rights due to its population and the amount of farmland. Reisner, supra note 15, at 124. Arizona's fears were particularly intense and spawned "five lawsuits in the United States Supreme Court, a filibuster in the Senate, a muster of troops by Arizona at the California border, and hundreds of thousands of words in congressional hearings and judicial proceedings." Charles J. Meyers, The ***Colorado*** ***River***, 19 Stan. L. Rev. 1, 37-38 (1966). Arizona was concerned that the doctrine of prior appropriation would apply in this situation, giving California the right to the water because it was the first to put the water to a beneficial use. The other less developed basin states wanted to assure that water would be available for them in the future. See [*Wyoming v.* ***Colorado****, 259 U.S. 419 (1922).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-45S0-003B-H2C4-00000-00&context=1516831) Thus, the Supreme Court held that Congress placed the "full power to control, manage, and operate the Government's ***Colorado*** ***River*** works and to make contracts for the sale and delivery of water" in the hands of the [*Secretary. Arizona v. California, 373 U.S. at 594.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [↑](#footnote-ref-57)
57. 57 Eric L. Garner & Michelle Ouellette, Future Shock? The Law of the ***Colorado*** ***River*** in the Twenty-First Century, [*27 Ariz. St. L.J. 469, 470 (1995).*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:3S3T-9850-00CV-809V-00000-00&context=1516831) [↑](#footnote-ref-58)
58. 58 ***Colorado*** ***River*** Compact, 123 ***Colo.*** Sess. Laws 684, [***Colo.*** *Rev. Stat. 37-61-101*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J33S-00000-00&context=1516831) to 104 (2001). [↑](#footnote-ref-59)
59. 59 Boulder Canyon Project Act of Dec. 21, 1928, ch. 42, [*45 Stat. 1057*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5C9D-VNP0-01XN-S392-00000-00&context=1516831) (codified as amended at [*43 U.S.C. 617*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-73R7-00000-00&context=1516831) (1994)). [↑](#footnote-ref-60)
60. 60 Treaty Respecting the Utilization of Waters of the ***Colorado*** and Tijuana ***Rivers*** and of the Rio Grande, Feb. 3, 1944, U.S.-Mex., [*59 Stat. 1219*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5CBP-FY70-01XN-S099-00000-00&context=1516831) [hereinafter Water Treaty of 1944]. [↑](#footnote-ref-61)
61. 61 [*Arizona v. California I, 373 U.S. 546 (1963);*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [*Arizona v. California II, 376 U.S. 340 (1964)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H350-003B-S2D6-00000-00&context=1516831) (decree implementing opinion of [*373 U.S. 546).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [↑](#footnote-ref-62)
62. 62 ***Colorado*** ***River*** Basin Project Act, [*43 U.S.C. 1501*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-74D2-00000-00&context=1516831)-1556 (1994). [↑](#footnote-ref-63)
63. 63 [*Arizona v. California I, 373 U.S. at 594*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) (recognizing that "Congress still has broad powers over this navigable international stream [and] can undoubtedly reduce or enlarge the Secretary's power if it wishes"); see also Bureau of Reclamation, Final Environmental Impact Statement, ***Colorado*** ***River*** Interim Surplus Criteria 1-10 (2000). [↑](#footnote-ref-64)
64. 64 70 Cong. Rec. 324, 325 (1928). The Lower Basin, for example, "means those parts of the states of Arizona, California, Nevada, New Mexico, and Utah within and from which waters naturally drain into the ***Colorado*** ***River*** System below Lee Ferry," and all parts within the states but outside the basin which will be served by those waters. Id. art. II(g). [↑](#footnote-ref-65)
65. 65 See Boulder Canyon Project Act of Dec. 21, 1928, ch. 42, [*45 Stat. 1057*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5C9D-VNP0-01XN-S392-00000-00&context=1516831) (codified as amended at [*43 U.S.C. 671*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-73VT-00000-00&context=1516831) (1994)) (apportioning the 7.5 million acre-feet per year among the Lower Basin states: 300,000 acre-feet per year to Nevada; 2.8 million acre-feet per year to Arizona; and 4.4 million acre-feet per year to California). The BCPA also requires parties using water to have contracts with the Secretary of the Interior whose terms are for permanent service, "under such general regulations as [the Secretary] may prescribe." Id. 617d. Between 1930 and 1944, the Secretary entered into contracts for water delivery with five California agencies, the State of Nevada, and the State of Arizona for their full entitlements. The Secretary has contracts with water users in California amounting to 5.362 million acre-feet per year, almost one million acre-feet greater than its apportionment. See Milton N. Nathanson, Updating the Hoover Dam Documents 1-27 (1978). [↑](#footnote-ref-66)
66. 66 Water Treaty of 1944, supra note 60, art. 10. However, average annual flows immediately before the Compact negotiations were approximately 18.1 million acre-feet per year (1906-21). Western Water Policy Review Advisory Commission, supra note 51, at 2-3. Long-term annual average flow is closer to 13.5 million acre-feet per year, leaving the ***river*** seriously overappropriated. Dale Pontius, ***Colorado*** ***River*** Basin Study 6 (1997). [↑](#footnote-ref-67)
67. 67 Upper ***Colorado*** ***River*** Basin Compact, [*63 Stat. 31, 33,*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5CCB-R1P0-01XN-S056-00000-00&context=1516831) [***Colo.*** *Rev. Stat. 37-62-101*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J33Y-00000-00&context=1516831) to 106 (2001) (allocating 51.75 percent to ***Colorado***, 11.25 percent to New Mexico, 23 percent to Utah, 14 percent to Wyoming, and 50,000 acre-feet to Arizona). [↑](#footnote-ref-68)
68. 68 [*Arizona v. California I, 373 U.S. 546 (1963);*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [*Arizona v. California II, 376 U.S. 340 (1964).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H350-003B-S2D6-00000-00&context=1516831) [↑](#footnote-ref-69)
69. 69 The Corps of Engineers dictates flood control for Lake Mead; the Bureau manages for flood control related to the Davis and Parker Dams. See Flood Control Act of 1944, [*33 U.S.C. 709;*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0FN2-D6RV-H306-00000-00&context=1516831) U.S. Army Corps of Engineers, Water Control Manual for Flood Control: Hoover Dam and Lake Mead ***Colorado*** ***River***, Nevada and Arizona (1982). [↑](#footnote-ref-70)
70. 70 [*43 U.S.C. 617e*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-73RD-00000-00&context=1516831) (1994). [↑](#footnote-ref-71)
71. 71 [*Arizona v. California II, 376 U.S. at 341.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H350-003B-S2D6-00000-00&context=1516831) [↑](#footnote-ref-72)
72. 72 [*Laughlin* ***River*** *Tours, Inc. v. Bureau of Reclamation, 730 F. Supp. 1522, 1524 (D. Nev. 1990).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4N-9NP0-0054-44G0-00000-00&context=1516831) [↑](#footnote-ref-73)
73. 73 [*Arizona v. California, 373 U.S. at 588-90.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) The Court held that the Boulder Canyon Project Act's provisions were:

    Persuasive that Congress intended the Secretary … both to carry out the allocation of the waters of the main ***Colorado*** ***River*** among the Lower Basin States and to decide which users within each State would get water … . Had Congress intended so to fetter the Secretary's discretion, it would have done so in clear and unequivocal terms.

    [*Id. at 580-81.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [↑](#footnote-ref-74)
74. 74 [*Id. at 585.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [↑](#footnote-ref-75)
75. 75 Id. [↑](#footnote-ref-76)
76. 76 [*Id. at 586.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [↑](#footnote-ref-77)
77. 77 Id.; see also [*id. at 589.*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) [↑](#footnote-ref-78)
78. 78 [*43 U.S.C. 1552*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-74DW-00000-00&context=1516831) (1994); U.S. Bureau of Reclamation, Criteria for Coordinated Long Range Operation of ***Colorado*** ***River*** Reservoirs Pursuant to the ***Colorado*** ***River*** Basin Project Act of September 30, 1968, at [*http://www.lc.usbr.gov/g1000/pdfiles/opcriter.pdf*](http://www.lc.usbr.gov/g1000/pdfiles/opcriter.pdf) [hereinafter Operating Criteria]. [↑](#footnote-ref-79)
79. 79 Articles I-IV of the Operating Criteria require the Secretary to prepare an Annual Operating Plan, the purposes of which are to determine: (1) the projected operation of the ***Colorado*** ***River*** reservoirs under varying hydrologic and climatic conditions; (2) the quantity of water considered necessary as of September 30, to be in storage in the Upper Basin reservoirs as required by Section 602(a) of the CRBPA; (3) water available for delivery to Mexico; (4) whether the Secretary will declare a "normal," "surplus," or "shortage" condition as outlined in Article III of the Operating Criteria; and (5) whether water apportioned to, but unused by, one or more Lower Basin States exists and can be used to satisfy beneficial consumptive use requests of mainstream users in other Lower Basin States as provided in the Arizona v. California decree. Id.; see also United States Bureau of Reclamation, 2002 Annual Operating Plan for ***Colorado*** ***River*** System Reservoirs, at [*http://www.lc.usbr.gov/g4000/aop02*](http://www.lc.usbr.gov/g4000/aop02) final.pdf. [↑](#footnote-ref-80)
80. 80 Operating Criteria, supra note 78, art. I(2). [↑](#footnote-ref-81)
81. 81 Id. at preamble. [↑](#footnote-ref-82)
82. 82 Id. art. III(3). [↑](#footnote-ref-83)
83. 83 [*Arizona v. California II, 376 U.S. 340, 342 (1964).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H350-003B-S2D6-00000-00&context=1516831) [↑](#footnote-ref-84)
84. 84 Record of Decision ***Colorado*** ***River*** Interim Surplus Guidelines, Final Environmental Impact Statement (2001). The Interim Surplus guidelines define surplus according to the level of Lake Mead rather than by hydrology and forecast, providing a more reliable supply. [↑](#footnote-ref-85)
85. 85 [*43 U.S.C. 1571*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-74F4-00000-00&context=1516831)-1599 (1994). [↑](#footnote-ref-86)
86. 86 Pub. L. No. 102-275, tit. XVIII, ***106 Stat. 4669.*** [↑](#footnote-ref-87)
87. 87 Ley General del Equilibrio Ecologico y la Proteccion al Ambiente, at http://www.cddhcu.gob.mx.leyinfo/148/ [hereinafter Federal Ecology Law]. See generally Environmental Law Institute, Decentralization of Environmental Protection in Mexico: An Overview of State and Local Laws and Institutions 5-30 (1996) [hereinafter Decentralization of Environmental Protection in Mexico], available at [*http://www.eli.org/pdf/resreportdecen.pdf*](http://www.eli.org/pdf/resreportdecen.pdf). [↑](#footnote-ref-88)
88. 88 With the new administration, SEMARNAT formed out of SEMARNAP when the "P" (Pesca or Fisheries) was relocated to SAGAPA, the Secretariat of Agriculture, Livestock, Fisheries and Food. [↑](#footnote-ref-89)
89. 89 Decentralization of Environmental Protection in Mexico, supra note 87, at 6. [↑](#footnote-ref-90)
90. 90Normas Oficiales Mexicanas, Que Determina las Especies y Subespecies de Flora y Fauna Silvestres Terrestres y Acaticas en Peligro de Extincion, Amenazadas, Raras y las Sujetas a Proteccion Especial y que Establece Especificaciones para su Proteccion," D.O., 16 de mayo de 1994 (NOM-059-ECOL-1994), available at [*http://www.ine.gob.mx/dgra/normas/rec*](http://www.ine.gob.mx/dgra/normas/rec) nat/no 059.htm. [↑](#footnote-ref-91)
91. 91 Id. [↑](#footnote-ref-92)
92. 92 Decentralization of Environmental Protection in Mexico, supra note 87, at 18. [↑](#footnote-ref-93)
93. 93 Jennifer Pitt et al., Two Nations, One ***River***: Managing Ecosystem Conservation in the ***Colorado*** ***River*** Delta, 40 Nat. Resources J. 819, 839 n.86 (2000). [↑](#footnote-ref-94)
94. 94 Decentralization of Environmental Protection in Mexico, supra note 87, at 18. [↑](#footnote-ref-95)
95. 95 Pitt, supra note 93, at 838-39. Mexico established the Upper Gulf of California and ***Colorado*** ***River*** Delta Biosphere Reserve (El Alto Golfo de California y Delta del Rio ***Colorado***). It is recognized by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), has a management plan, and contains a core zone and a buffer zone totaling 934,755 hectares. See Wendy Laird et al., Cooperation across Borders: A Brief History of Biosphere Reserves in the Sonoran Desert, 39 J. of the Southwest 307, 309 (1997). [↑](#footnote-ref-96)
96. 96 See David A. Shirk, Mexico's New Border Commission: A First Look, Borderlines, April 2001. Also in 2000, Mexico adopted a new federal wildlife law, Ley General de Vida Silvestre, D.O.F. 7 de marzo 2000, available at [*http://www.ine.gob.mx/dgvs/ley*](http://www.ine.gob.mx/dgvs/ley) vs.html; see William Snape III et al., Protecting Ecosystems Under the Endangered Species Act: The Sonoran Desert Example,[*41 Washburn L.J. 14, 45-48 (2001).*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:44NK-GJG0-00CV-G0S2-00000-00&context=1516831) [↑](#footnote-ref-97)
97. 97 After the war with Mexico, Mexico ceded nearly half its territory (529,000 square miles) to the United States Treaty of Peace, Friendship, Limits and Settlement with the Republic of Mexico, Feb. 2, 1848, U.S.-Mex., [*9 Stat. 922*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5C6W-DC70-01XN-S0GF-00000-00&context=1516831) [hereinafter Treaty of Guadalupe Hidalgo]. Subsequently, the Gadsden Treaty clarified boundary issues unresolved by the Treaty of Guadalupe Hidalgo, and Mexico ceded an additional 29,142,000 acres to the United States Boundary Treaty, Dec. 30, 1853, U.S.-Mex., [*10 Stat. 1031;*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5C6W-DC80-01XN-S1M7-00000-00&context=1516831) see also Ernie Niemi & Tom McGuckin, Water Management Study: Upper Rio Grande Basin 11 (1997); James M. Burson, Middle Rio Grande Regional Water Resource Planning: The Pitfalls and the Promises, 40 Nat. Resources J. 533, 537-38 (2000). [↑](#footnote-ref-98)
98. 98 There are generally recognized thirty-four tribes in the Lower ***Colorado*** ***River*** basin with both quantified and unquantified water rights. See Western Water Policy Review Advisory Commission, supra note 51, at 75. [↑](#footnote-ref-99)
99. 99 Memorandum from the Regional Director, Region 2, to Area Manager, Albuquerque Area Office, Bureau of Reclamation 6 (June 29, 2001) (on file with author). [↑](#footnote-ref-100)
100. 100 See generally Allen V. Kneese & Gilbert Bonem, Hypothetical Shocks to Water Allocation Institutions in the ***Colorado*** Basin, in New Courses for the ***Colorado*** ***River***: Major Issues for the Next Century 87, 94-98 (Gary D. Weatherford & F. Lee Brown eds., 1986). [↑](#footnote-ref-101)
101. 101 [*Winters v. United States, 207 U.S. 564, 576-77 (1908)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-9WV0-003B-H241-00000-00&context=1516831) (holding that water rights exist because reservation lands were practically useless without irrigation and argument for retention of waters is of more force since ambiguities are resolved in favor of Indians). [↑](#footnote-ref-102)
102. 102 In the case of some Pueblos, whose sovereignty was recognized by prior Spanish and Mexican governments, their water rights may predate the reservation. Niemi & McGuckin, supra note 97, at 20; see also Burson, supra note 97, at 545-48. [↑](#footnote-ref-103)
103. 103 [*Arizona v. California, 373 U.S. 546, 595-601 (1963)*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-H3B0-003B-S2D7-00000-00&context=1516831) (granting approximately 761,000 acre-feet to five tribes along the mainstem and applying the reservation of water to other types of federal reservations, such as wildlife refuges and parks). Recently, the Arizona Supreme Court rejected PIA as the standard for determining allocation, and established a set of factors based on history and culture of the tribe and geography, topography, population growth and groundwater availability of the reservation. In re Gen. Adjudication of all Rights to Use Water in the [*Gila* ***River*** *Sys. & Source, 35 P.3d 68 (Ariz. 2001).*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:44JD-GKM0-0039-43YD-00000-00&context=1516831) [↑](#footnote-ref-104)
104. 104 See generally Mary Christina Wood, Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited, [*1994 Utah L. Rev. 1471 (1994).*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:3S3T-WG10-00CW-50CN-00000-00&context=1516831) [↑](#footnote-ref-105)
105. 105 [*Seminole Nation v. United States, 316 U.S. 286, 297 (1942);*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4X-5CX0-003B-749C-00000-00&context=1516831) see also Sec. Order No. 3206: American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (June 5, 1997) (on file with author); Department of Justice Policy on Indian Sovereignty And Government-to-Government Relations With Indian Tribes, Op. Att'y Gen. (1995) (on file with author). [↑](#footnote-ref-106)
106. 106 See infra notes 150-54 and accompanying text. [↑](#footnote-ref-107)
107. 107 Convention between the United States and Mexico, Equitable Distribution of the Waters of the Rio Grande, Jan. 16, 1907, U.S.-Mex., art. II, [*34 Stat. 2953, 2954.*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5C8C-P7W0-01XN-S4V0-00000-00&context=1516831) The Water Treaty of 1944 also divides the Rio Grande waters, requiring delivery of 1.75 million acre-feet every five years from tributaries in Mexico to the ***river*** below Elephant Butte. Water Treaty of 1944, supra note 60, art. IV. [↑](#footnote-ref-108)
108. 108 Niemi & McGuckin, supra note 97, at 4, 9. [↑](#footnote-ref-109)
109. 109 Rio Grande Compact, [***Colo.*** *Rev. Stat. 37-66-101*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:61P5-WY01-DYDC-J34F-00000-00&context=1516831) to 102 (2001), [*53 Stat. 785.*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5CCB-R1G0-01XN-S0HB-00000-00&context=1516831) [↑](#footnote-ref-110)
110. 110 Id. [↑](#footnote-ref-111)
111. 111 Congress approved those proposals in the Flood Control Acts of 1948 and 1950. Pub. L. No. 80-858, ch. 771, ***62 Stat. 1175;*** Pub. L. No. 81-516, ch. 188, ***64 Stat. 170.*** [↑](#footnote-ref-112)
112. 112 See ***Middle Rio Grande Water Users' Ass'n v. Middle Rio Grande Conservancy Dist., 258 P.2d 391, 393 (1953)*** (holding the 1951 contract between MRGCD and the Bureau valid). [↑](#footnote-ref-113)
113. 113 By the late 1940s, 60 percent of farms in MRGCD, totaling 90 percent of MRGCD's acreage, was delinquent in their taxes. See Middle Rio Grande Conservancy District Water Policies Plan 21-23 (C.T. DuMars & S.C. Nunn eds., 1993). The United States would thus assume ownership of all MRGCD diversion and storage facilities until project costs were repaid and Congress ordered a transfer back to MRGCD. See [*43 U.S.C. 491,*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-73GX-00000-00&context=1516831) 498 (1994). [↑](#footnote-ref-114)
114. 114 [*43 U.S.C. 620a.*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8SDD-0HD2-8T6X-73SY-00000-00&context=1516831) New Mexico is still looking for additional ways to tap into the ***Colorado***. See Tania Soussan, State Considers Drawing on Gila Water, Albuquerque J., Aug. 21, 2001, at A1. [↑](#footnote-ref-115)
115. 115 Flood Control Act of 1960, Pub. L. No. 86-645, [*74 Stat. 480*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5CFP-G930-01XN-S4T4-00000-00&context=1516831) (setting the operating criteria for the Corps dams). [↑](#footnote-ref-116)
116. 116 See supra note 111. [↑](#footnote-ref-117)
117. 117 Pub. L. No. 97-140, [*95 Stat. 1717, 5*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5CD7-HSM0-01XN-S2W4-00000-00&context=1516831)(b) (authorizing San Juan-Chama storage); Pub. L. No. 100-522, ***102 Stat. 2604*** (authorizing Rio Grande storage). [↑](#footnote-ref-118)
118. 118 Flood Control Act of 1960, Pub. L. No. 86-645, [*74 Stat. 488.*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:5CFP-G930-01XN-S4T4-00000-00&context=1516831) [↑](#footnote-ref-119)
119. 119 Pub. L. No. 88-293, ***78 Stat. 171.*** [↑](#footnote-ref-120)
120. 120 U.S. Army Corps of Engineers Programmatic Biological Assessment of U.S. Army Corps of Engineers Water-Operation Rules on the Middle Rio Grande, New Mexico 7 (2001). [↑](#footnote-ref-121)
121. 121 See Pitt, supra note 93, at 836-42. [↑](#footnote-ref-122)
122. 122 See generally Peter Friederici, Stolen ***River***: The ***Colorado*** ***River*** and Its Delta Are Losing Out, 11 Defenders 10 (1998). [↑](#footnote-ref-123)
123. 123 Edward Glenn et al., Effects of Water Management on the Wetlands of the ***Colorado*** ***River*** Delta, Mexico, 10 Conservation Biology 1175, 1176 (1996). [↑](#footnote-ref-124)
124. 124 Western Water Policy Review Advisory Commission, supra note 51, at 2-9. [↑](#footnote-ref-125)
125. 125 Edward P. Glenn, Importance of United States' Water Flows to the ***Colorado*** ***River*** Delta and the Northern Gulf of California, Mexico 14 (unpublished manuscript) (1998) (on file with author) [hereinafter Importance of United States' Water Flows]. [↑](#footnote-ref-126)
126. 126 Glenn, supra note 123, at 1177. [↑](#footnote-ref-127)
127. 127 Id. [↑](#footnote-ref-128)
128. 128 North American Wetlands Conservation Council, Wetland Management & Restoration in the ***Colorado*** ***River*** Delta: The First Steps 4 (1998). [↑](#footnote-ref-129)
129. 129 Water Treaty of 1944, supra note 60, art. II. [↑](#footnote-ref-130)
130. 130 The 1944 Water Treaty provides that the IBWC shall consist of a United States Section and a Mexican Section.

     The Treaty further provides that it shall in all respects have the status of an international body, that the head of each Section must be an Engineer Commissioner and that wherever Treaty provisions call for joint action or joint agreement by the two Governments such matters shall be handled by or through the Department of State of the United States and the Secretariat of Foreign Relations of Mexico.

     The International Boundary, United States and Mexico, at [*http://www.ibwc.state.gov/ORGANIZA/about*](http://www.ibwc.state.gov/ORGANIZA/about) us.htm. [↑](#footnote-ref-131)
131. 131 Charles J. Meyers & Richard L. Noble, The ***Colorado*** ***River***: The Treaty with Mexico, 19 Stan. L. Rev. 367 (1967). [↑](#footnote-ref-132)
132. 132 See generally Stephen P. Mumme, Reinventing the International Boundary and Water Commission, Borderlines, July 2001. [↑](#footnote-ref-133)
133. 133 International Boundary and Water Commission, IBWC-34-97, Meeting of the Commission to Form a Fourth ***Colorado*** ***River*** Matters Task Force Regarding the ***Colorado*** ***River*** Data Mexicali, Baja California (1997) (on file with author). [↑](#footnote-ref-134)
134. 134 Terms of Reference, Lower ***Colorado*** ***River*** Delta Task Force (October 28, 1997) (on file with author). [↑](#footnote-ref-135)
135. 135 The work group has recently coordinated and approved proposals to develop an ecological-scientific studies database, a water flow inundation model, and a pilot restoration project. International Boundary and Water Commission, Annual Report 2000, at 7 (2000) (on file with author). [↑](#footnote-ref-136)
136. 136 For example, the IBWC even leads consultation with the government of Mexico when the Department or an agency proposes an action that may impact the delta or Gulf. See Bureau of Reclamation, ***Colorado*** ***River*** Interim Surplus Criteria: Final Environmental Impact Statement vol. I, at 5-7 (2000); Bureau of Reclamation, Final Environmental Impact Statement/Final Environmental Impact Report VIII-3 (1994) (describing the IBWC's consultation process with Mexico, with the assistance of the Bureau of Reclamation) (on file with author). [↑](#footnote-ref-137)
137. 137 See, e.g. Daniel F. Luecke et al., A Delta Once More: Restoring Riparian and Wetland Habitat in the ***Colorado*** ***River*** Delta (1999); Glenn, supra note 123, at 1184. [↑](#footnote-ref-138)
138. 138 In 1997, Secretary Babbitt and Secretary Carabias signed a joint Letter of Intent announcing plans

     to expand existing cooperative activities in the conservation of contiguous natural protected areas, … to harmonize activities directed at the conservation of biological diversity, … beginning with pilot projects … in Mexico, the Biosphere Reserves of the Alto Golfo de California y Delta del Rio ***Colorado*** … [including] harmonization and coordination of policies leading to the conservation of natural and cultural resources.

     Letter of Intent between the Department of Interior (DOI) of the United States and the Secretariat of Environment, Natural Resources and Fisheries (SEMARNAP) of the United Mexican States for Joint Work in Natural Protected Areas on the United States-Mexico Border (May 5, 1997) (on file with author). [↑](#footnote-ref-139)
139. 139 In May 2000, the United States and Mexico collaborated on a Joint Declaration that recognizes the increasing efforts of non-governmental organizations and communities and the IBWC Task Force. Joint Declaration between the Department of the Interior (DOI) of the United States of America and the Secretariat of Environment, Natural Resources and Fisheries (SEMARNAP) of the United Mexican States to Enhance Cooperation in the ***Colorado*** ***River*** Delta (May 18, 2000) (on file with author). The countries have committed to support the Task Force, coordinate research efforts and "strengthen cooperative action and mechanisms, to improve and conserve the natural and cultural resources of the ***Colorado*** ***River*** Delta, including the ***river*** and associated wetland habitats." Id. [↑](#footnote-ref-140)
140. 140 See, e.g., North American Wetlands Conservation Council Participation in Conservation Efforts in the Delta of the ***Colorado*** ***River***, Mexico and Summary List of Delta Projects [where DOI is involved] (distributed at United States Stakeholders Workshop, ***Colorado*** ***River*** Delta, Oct. 11, 2000) (Oct. 2000) (on file with author). [↑](#footnote-ref-141)
141. 141 While the Fourth Work Group formed in 1997, it was inactive for two years. Pitt, supra note 93, at 837 n.77. The lack of activity may also be due to "the position of the United States State Department through the United States Section of the International Boundary and Water Commission that the United States does not mitigate for impacts in a foreign country." Bureau of Reclamation, Final Environmental Impact Statement ***Colorado*** ***River*** Interim Surplus Criteria, vol. I, at 3.17-3 (2000). [↑](#footnote-ref-142)
142. 142 U.S. Stakeholder Meeting for the Implementation of the DOI-SEMARNAP Joint Declaration on the ***Colorado*** ***River*** Delta (Oct. 11, 2000) (on file with author). [↑](#footnote-ref-143)
143. 143 Minute 302 to the 1944 Treaty is another example of a conceptual minute. See [*http://www.ibwc.state.gov/FORAFFAI/MINUTES/minindex.HTM*](http://www.ibwc.state.gov/FORAFFAI/MINUTES/minindex.HTM). [↑](#footnote-ref-144)
144. 144 Conceptual Framework for United States-Mexico Studies for Future Recommendations Concerning the Riparian and Estuarine Ecology of the Limitrophe Section of the ***Colorado*** ***River*** and its Associated Delta (Minute 306), available at [*http://www.ibwc.state.gov/FORAFFAI/MINUTES/minindex.HTM*](http://www.ibwc.state.gov/FORAFFAI/MINUTES/minindex.HTM); see also Ken Ellingwood & Tony Perry, U.S., Mexico Pledge to Save ***Colorado*** Delta, L.A. Times, Dec. 26, 2000, at A3. [↑](#footnote-ref-145)
145. 145 Minute 306, supra note 144. [↑](#footnote-ref-146)
146. 146 Id. [↑](#footnote-ref-147)
147. 147 Press Release, United States and Mexico Sign Agreement on ***Colorado*** ***River*** Delta, (Dec. 13, 2000) (recognizing growing influence of these stakeholders), available at [*http://www.ibwc.state.gov/PAO/CURPRESS/ColoradoMin306final*](http://www.ibwc.state.gov/PAO/CURPRESS/ColoradoMin306final) .htm. Cf. Roberto Sanchez, Public Participation and the IBWC: Challenges and Options, 33 Nat. Resources J. 283 (1993) (discussing the historic lack of public participation in IBWC processes). [↑](#footnote-ref-148)
148. 148 ***Colorado*** ***River*** Delta Symposium, Welcome and Objectives, Mexicali, Baja California, Sept. 11-12, 2001 (on file with author). [↑](#footnote-ref-149)
149. 149 See Brent Israelsen, Rejuvenating ***Colorado*** ***River*** Delta Remains at Odds With Water Rights, Salt Lake Trib., Sept. 17, 2001. [↑](#footnote-ref-150)
150. 150 See, e.g., [*Pyramid Lake Paiute Tribe v. Morton, 354 F. Supp. 252, 256 (D. D.C. 1972),*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4V-KJC0-003B-32CR-00000-00&context=1516831) modified on other grounds, [*360 F. Supp. 669 (D. D.C. 1973),*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4V-JJ10-003B-33DB-00000-00&context=1516831) rev'd on other grounds, [*499 F.2d 1095 (D.C. Cir. 1974),*](https://advance.lexis.com/api/document?collection=cases&id=urn:contentItem:3S4W-WJY0-0039-X3SS-00000-00&context=1516831) cert. denied, ***420 U.S. 962 (1975);*** Tim Vollmann, The Endangered Species Act and Indian Water Rights, 11 Nat. Res. & Envt. 39 (1996). [↑](#footnote-ref-151)
151. 151 Memorandum for the Heads of Executive Departments and Agencies, Government-to-Government Relations with Native American Tribal Governments, [*59 Fed. Reg. 22,951*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3SHC-9B90-006W-933G-00000-00&context=1516831) (May 4, 1994) (Government-to-Government Directive); see also Exec. Order No. 13175, [*65 Fed. Reg. 67,249*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:41M8-T3R0-006W-807B-00000-00&context=1516831) (Nov. 6, 2000). [↑](#footnote-ref-152)
152. 152 See supra note 151; see also Klamath Tribes v. United States, 1996 WL 924509 (D. Or. 1996). [↑](#footnote-ref-153)
153. 153 Rio Grande Silvery Minnow v. Keys, No. CV-99-1320 JP/RBM-ACE (D. N.M. filed July 2, 2001) (challenging the adequacy of ESA Section 7 consultation). [↑](#footnote-ref-154)
154. 154 For a general overview of Departmental responsibilities, see Mary Christina Wood, Fulfilling the Executive's Trust Responsibility Toward the Native Nations on Environmental Issues: A Partial Critique of the Clinton Administration's Promises and Performance, [*25 Envtl. L. 733, 754 n.80 (1995).*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:3S3V-2T90-00CW-B28H-00000-00&context=1516831) [↑](#footnote-ref-155)
155. 155 See Lisa D. Brown, The Middle Rio Grande Conservancy District's Protected Water Rights: Legal, Beneficial, or Against the Public Interest in New Mexico?, 40 Nat. Resources J. 1 (2000). [↑](#footnote-ref-156)
156. 156 See, e.g., Isabel Sanchez, Irrigation District Can't Shake Feds, Albuquerque J., May 31, 2001, at D1; Tania Soussan, Farmers' Water Called Safe, Albuquerque J., Feb. 2, 2001, at B3. [↑](#footnote-ref-157)
157. 157 Ben Neary, Water District Might be Headed for Restrictions, Santa Fe New Mexican, Mar. 7, 2001, at B1. [↑](#footnote-ref-158)
158. 158 Mike Taugher & Tania Soussan, Middle Rio Grande Water District's Use, Rights Unknown, Albuquerque J., Aug. 30, 1999, at A1. [↑](#footnote-ref-159)
159. 159 Ben Neary, Make Do With Less Water, Irrigators Told, Santa Fe New Mexican, Mar. 24, 2001, at A1. [↑](#footnote-ref-160)
160. 160 Id. In addition, the original permit was for 120,000, so the District has also shrunk. Id. [↑](#footnote-ref-161)
161. 161 Lowry McAllen, A ***River*** of Discord, Albuquerque Trib., Mar. 31, 2001, at A1. [↑](#footnote-ref-162)
162. 162 Tania Soussan, Effective Irrigation Advocated, Albuquerque J., Mar. 24, 2001, at A1. [↑](#footnote-ref-163)
163. 163 Glenn, supra note 123, at 1184. [↑](#footnote-ref-164)
164. 164 [*16 U.S.C. 1271*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S7X-DBF2-D6RV-H4F0-00000-00&context=1516831)-1287 (2000). Portions of eight tributaries and the mainstream have been studied for designation as wild and scenic ***rivers***. [*16 U.S.C. 1276*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:67F7-73B3-GXF6-8177-00000-00&context=1516831) (a)(34), (36), (38), (39), (43), (47), (55), (56). [↑](#footnote-ref-165)
165. 165 Grand Canyon Protection Act of 1992, Pub. L. No. 102-575, tit. XVIII, ***106 Stat. 4669.*** As a result of the Act and an EIS, daily releases from Lake Powell are strictly limited and occasional releases of 30,000 to 40,000 cfs are allowed to build sandbars and stream channels. In 1996, for seven days the Grand Canyon was flooded in order to restore sandbars and beaches. Scott K. Miller, Undamming Glen Canyon: Lunacy, Rationality, or Prophecy?, [*19 Stan. Envtl. L.J. 121, 162 (2000).*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:3YF9-MJ10-00CT-V0GX-00000-00&context=1516831) [↑](#footnote-ref-166)
166. 166 Pub. L. No. 102-575, tit. XXXIV, ***106 Stat. 4706.*** [↑](#footnote-ref-167)
167. 167 U.S. Fish and Wildlife Service Recovery Implementation Program for Endangered Fish Species in the Upper ***Colorado*** ***River*** Basin 5-7 (rev. 1995); see also David H. Getches, Competing Demands for the ***Colorado*** ***River***, 56 U. ***Colo.*** L. Rev. 413, 447 (1985). [↑](#footnote-ref-168)
168. 168 See James S. Lochhead, An Upper Basin Perspective on California's Claims to Water from the ***Colorado*** ***River*** Part I: The Law of the ***River***, [*4 U. Denv. Water L. Rev. 290 (2001)*](https://advance.lexis.com/api/document?collection=analytical-materials&id=urn:contentItem:43XH-WN80-00SW-5022-00000-00&context=1516831) (asserting that interbasin transfers violate the Compact and Arizona v. California Decree); Bureau of Reclamation, Final Environmental Impact Statement ***Colorado*** ***River*** Interim Surplus Criteria, vol. I, at 2-4 (2000). [↑](#footnote-ref-169)
169. 169 The biological opinion of 2001 expanded the scope to cover all activities from the ***Colorado*** state line south to Elephant Butte Reservoir. U.S. Fish and Wildlife Service, Programmatic Biological Opinion on the Effects of Actions Associated with the U.S. Bureau of Reclamation's, U.S. Army Corps of Engineers', and Non-Federal Entities' Discretionary Actions Related to Water Management on the Middle Rio Grande, New Mexico 56 (June 29, 2001) (on file with author). [↑](#footnote-ref-170)
170. 170 Endangered and Threatened Wildlife and Plants; Final Rule to List the Rio Grande Silvery Minnow as an Endangered Species, [*59 Fed. Reg. 36,988*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3SHC-7NR0-006W-93Y5-00000-00&context=1516831) (July 20, 1994) (to be codified at 50 C.F.R. pt. 17). [↑](#footnote-ref-171)
171. 171 Multi-Species Conservation Program (MSCP) for the Lower ***Colorado*** ***River***, Arizona, Nevada, and California, [*64 Fed. Reg. 27,000, 27,001*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3WGX-YXN0-006W-82RT-00000-00&context=1516831) (May 18, 1999). The boundary between the United States and Mexico is delineated by the Northern International Boundary ("NIB") between California and Baja California until it meets the ***Colorado*** ***River***, where, for twenty-two miles the ***River*** forms the boundary (known as the limitrophe), and meets the Southern International Boundary ("SIB"), the boundary between Arizona and Sonora. [↑](#footnote-ref-172)
172. 172 Endangered and Threatened Wildlife and Plants; Determination of Critical Habitat for the ***Colorado*** ***River*** Endangered Fishes: Razorback Sucker, ***Colorado*** Squawfish, Humpback Chub, and Bonytail Chub, [*59 Fed. Reg. 13,374*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3SHC-93P0-006W-9391-00000-00&context=1516831) (Mar. 21, 1994) (to be codified at 50 C.F.R. pt. 17). The ***Colorado*** squawfish has been renamed the ***Colorado*** pikeminnow. [↑](#footnote-ref-173)
173. 173 Endangered and Threatened Wildlife and Plants ; Final Rule Determining Endangered Status for the Southwestern Willow Flycatcher, [*60 Fed. Reg. 10,694*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3SHC-6CF0-006W-950R-00000-00&context=1516831) (Feb. 27, 1995) (to be codified at 50 C.F.R. pt. 17). [↑](#footnote-ref-174)
174. 174 Memorandum of Agreement for Development of a Lower ***Colorado*** ***River*** Species Conservation Program (Aug. 2, 1995) (on file with author). [↑](#footnote-ref-175)
175. 175 Id. [↑](#footnote-ref-176)
176. 176 Id. [↑](#footnote-ref-177)
177. 177 See Letter from Gregory Sater, Defenders of Wildlife, to Bruce Babbitt, Secretary, United States Department of the Interior et al., (Feb. 6, 1996) (outlining the Bureau's attempts to avoid consultation and the agency's legal obligations under the ESA) (on file with author). [↑](#footnote-ref-178)
178. 178 Memorandum of Clarification (July 17, 1996) (on file with author). [↑](#footnote-ref-179)
179. 179 Department of the Interior, Bureau of Reclamation, at [*http://www.lcrmscp.org/noi*](http://www.lcrmscp.org/noi) 2000.html. [↑](#footnote-ref-180)
180. 180 Multi-Species Conservation Plan, Review Draft Introduction, Purpose and Need, Description of Covered Actions, Effect of Covered Actions, and No Action Alternative 3-5 (1999) (on file with author). [↑](#footnote-ref-181)
181. 181 See Multi-Species Conservation Program (MSCP) for the Lower ***Colorado*** ***River***, Arizona, Nevada, and California, [*64 Fed. Reg. 27,000 27,001*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3WGX-YXN0-006W-82RT-00000-00&context=1516831) (May 18, 1999). [↑](#footnote-ref-182)
182. 182 Facilitation Team Issue Paper Recommendation (Sept. 21, 1998) (on file with author). [↑](#footnote-ref-183)
183. 183 Lower ***Colorado*** ***River*** Multi-Species Conservation Program, Steering Committee Meeting (Nov. 5, 1998) (on file with author). [↑](#footnote-ref-184)
184. 184 See November 5, 1998 MSCP Steering Committee Meeting Notes, Comment, Myopia on the ***Colorado***, Arizona Daily Star, Nov. 12, 1998, at [*14*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8T9R-T5M2-D6RV-H38C-00000-00&context=1516831)A (on file with author). [↑](#footnote-ref-185)
185. 185 See Letter from John Fritschie and David Hogan, Defenders of Wildlife and Center for Biological Diversity, to Robert Johnson, Regional Director, Bureau of Reclamation (Nov. 9, 1998) (on file with author); see also John Kostyack, Habitat Conservation Planning: Time to Give Conservationists and Other Concerned Citizens a Seat at the Table, 14 Endangered Species Update 51 (July-Aug. 1997). [↑](#footnote-ref-186)
186. 186 See Defenders of Wildlife v. Babbitt, Civ. No. 00-1544 (D. D.C. filed June 28, 2000). At press this important case has been fully briefed on the merits and the judge has heard oral argument. [↑](#footnote-ref-187)
187. 187 See generally ***50 C.F.R. 17.11 (2001)***; see also [*60 Fed. Reg. 10,694*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3SHC-6CF0-006W-950R-00000-00&context=1516831) (Feb. 27, 1995) (southwestern willow flycatcher); ***51 Fed. Reg. 10,842*** (Mar. 31, 1986) (desert pupfish); ***50 Fed. Reg. 1056*** (Jan. 9, 1985) (cochito); [*44 Fed. Reg. 29,478*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:518D-CWM0-00H6-R2DT-00000-00&context=1516831) (May 21, 1979) (totoaba); ***32 Fed. Reg. 4001*** (Mar. 11, 1967) (Yuma clapper rail). [↑](#footnote-ref-188)
188. 188 See Habitat Conservation Plan Assurances ("No Surprises") Rule, [*63 Fed. Reg. 8859*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3S35-KTM0-006W-83TH-00000-00&context=1516831) (Feb. 23, 1998) (to be codified at 50 C.F.R. pt. 17). Just as the Secretary may permit incidental takings by federal entities after section 7 consultation, the Secretary may also issue incidental take permits to private parties under section 10. [*16 U.S.C. 1539*](https://advance.lexis.com/api/document?collection=statutes-legislation&id=urn:contentItem:8S8T-0KG2-8T6X-7088-00000-00&context=1516831)(a) (2000). First, the parties must submit a habitat conservation plan ("HCP") that specifies impacts, steps to minimize and mitigate impacts, any available funding, and other necessary measures. Id. 1539(a)(2)(A). Thus there will also be an HCP component of the MSCP for non-federal interests. [↑](#footnote-ref-189)
189. 189 In fact, the treaty itself, and Mexico's allocation, was finalized to the dismay of the seven basin states. See Meyers & Noble, supra note 131, at 381-86. [↑](#footnote-ref-190)
190. 190 See Semarnat, en desacuerdo con la decision unilateral: Afecta a Mexico cambio de EU en el manejo del rio ***Colorado***, La Jornada, Jan. 24, 2001; Mexico Warns United States Over Risks to ***River***, Reuters News Service, Feb. 7, 2001. [↑](#footnote-ref-191)
191. 191 Haley Nolde, Fate of region high and dry after canal fix, San Jose Mercury News, Dec. 17, 2000. [↑](#footnote-ref-192)
192. 192 Carlos Reyes, Urgen Mexico y EU Aclarar Uso del Agua, El Norte, Feb. 23, 2001, available at [*http://www.elnorte.com/nacional/articulo/092521/*](http://www.elnorte.com/nacional/articulo/092521/). [↑](#footnote-ref-193)
193. 193 Letter from Defenders of Wildlife et al., to Rosario Green, Minister of Foreign Affairs; Arturo Herrera, Commissioner, CILA; Julia Carabias, Secretaria de Medio Ambiente Recursos Naturales y Pesca (SEMARNAP); Comision Nacional del Agua (CNA); Madeleine Albright, Secretary, U.S. Department of State; John Bernal, Commissioner, IBWC; George Frampton, Chair, Council on Environmental Quality; Bruce Babbitt, Secretary, U.S. Department of the Interior; William M. Daley, Secretary, U.S. Department of Commerce; Carol Browner, Administrator, U.S. Environmental Protection Agency (Nov. 24, 1999) (on file with author). [↑](#footnote-ref-194)
194. 194 See Frank S. Wilson, A Fish Out of Water: A Proposal for International Instream Flow Rights in the Lower ***Colorado*** ***River***, 5 ***Colo.*** J. Int'l Envtl. L. Pol'y 249 (1994). [↑](#footnote-ref-195)
195. 195 See Bureau of Reclamation, Final Environmental Impact Statement ***Colorado*** ***River*** Interim Surplus Criteria, vol. I, at 2-4 (2000) (rejecting Pacific Institute surplus criteria alternative that would provide perennial base flows and periodic flood flows to the ***Colorado*** ***River*** Delta); Courses Of Action Identified At The Symposium On The Delta Of The ***Colorado*** ***River*** Held Sept. 11-12, 2001 (developed by the Mexican delegation, proposing "that both governments promise to provide volumes of water to protect and restore the ecosystems of the Delta.") (on file with author). [↑](#footnote-ref-196)
196. 196 See, e.g., Jo Clark et al., Immediate Options for Augmenting Water Flows in the ***Colorado*** ***River*** Delta in Mexico (May 2001), available at [*http://www.sonoran.org/pdf/****Colorado***](http://www.sonoran.org/pdf/Colorado) ***River***.pdf (exploring sources of water in the United States and Mexico for Delta restoration). [↑](#footnote-ref-197)
197. 197 Endangered and Threatened Wildlife; Final Designation of Critical Habitat for the Rio Grande Silvery Minnow, [*64 Fed. Reg. 36,274*](https://advance.lexis.com/api/document?collection=administrative-codes&id=urn:contentItem:3WWC-XP10-006W-83MF-00000-00&context=1516831) (July 6, 1999) (to be codified at 50 C.F.R. pt. 17). [↑](#footnote-ref-198)
198. 198 Mike Taugher, Silvery Minnow Losses Send Biologists into Crisis Mode, Albuquerque J., Nov. 11, 1999, at A1 (asserting that the minnow was closer to extinction than ever seen before). [↑](#footnote-ref-199)
199. 199 Mike Taugher, Feds Ask Biologists to Redo ***River*** Report, Albuquerque J., Nov. 3, 1999, at A1. The Fish and Wildlife Service had produced a draft biological opinion on the effects of federal activities on the minnow and flycatcher, but did not release or finalize it. Instead, they agreed to issue a new biological opinion, which was not produced until June 29, 2001. See Letter from Regional Director, Region 2, to Area Manager, Albuquerque Area Office, Bureau of Reclamation (June 29, 2001) (on file with author). [↑](#footnote-ref-200)
200. 200 Plaintiffs' Complaint, Rio Grande Silvery Minnow v. Martinez, Civ. No. 99-1320-JP/KBM-ACE (D. N.M. filed Dec. 3, 1999). After the issuance of the June 2001 biological opinion, plaintiffs filed an amended complaint challenging the adequacy of the consultation, particularly the scope of federal actions analyzed. [↑](#footnote-ref-201)
201. 201 Memorandum of Understanding, Middle Rio Grande Endangered Species Act Collaborative Program (Jan. 3, 2000) (on file with author). [↑](#footnote-ref-202)
202. 202 Id. [↑](#footnote-ref-203)
203. 203 See S. Rep. No. 106-395, 95 (2000) (in appropriating funds to the Bureau of Reclamation:

     But more can and must be done to establish a single entity, reflecting the range of interests, along the Rio Grande if the recovery effort is to be successful and to ensure the efficient use of available resources. Further, a single comprehensive group will ensure that activities undertaken are based on sound science and contribute directly to silvery minnow recovery. Future funding will be dependent upon a program plan for recovery activities that is supported by State and local governments, Federal agencies, Tribes, and water users.). [↑](#footnote-ref-204)
204. 204 See Norman Gaume, Director, New Mexico Interstate Stream Commission Presentation at the CLE International Law of the Rio Grande Conference, Endangered Species Act in the Middle Rio Grande (Jan. 18, 2002) (presentation available in CLE International Course Materials, Law of the Rio Grande) (on file with author). [↑](#footnote-ref-205)
205. 205 ESA Work Group Meeting, at 9 (July 27, 2001). [↑](#footnote-ref-206)
206. 206 ESA Work Group Meeting, at 7 (Aug. 3, 2001). The Bureau of Reclamation and Corps of Engineers, as parties to the Program, must also consult. [↑](#footnote-ref-207)
207. 207 See ESA Work Group Meeting, at 2-4 (Sept. 17, 2001) (devising ways to involve the pueblos in the Program's fiscal year 2002 funding request). [↑](#footnote-ref-208)
208. 208 See Plaintiffs' Opening Case Brief on Second Amended Complaint, Rio Grande Silvery Minnow v. McDonald, Civ. No. 99-1320-JP/RLP-ACE (D. N.M. filed July 16, 2001) (alleging that in issuing its biological opinion, FWS simply accepted the Bureau's position on its discretion, and thus did not consult on the full range of operations or consider the full spectrum of mitigation measures). Shortly before this article went to press, Judge Parker issued a decision finding that the Bureau violated the ESA by failing to consult with the Fish and Wildlife Service about using water from two federal reclamation projects. Rio Grand Silvery Minnow v. Keys, Civ. No. 99-1320 JP/RLP-ACE (D. N.M. April 19, 2002). [↑](#footnote-ref-209)
209. 209 Associated Press, Draft Species Protection Plan Allows Dry Rio Grande at Times, Albuquerque Trib., Mar. 15, 2001. [↑](#footnote-ref-210)
210. 210 Commentators often sarcastically refer to Minute 242 and the 1944 Water Treaty, titled "The Permanent and Definitive Solution to the International Problem of Salinity at the ***Colorado*** ***River***," because it is hardly that. [↑](#footnote-ref-211)
211. 211 Ann Brower et al., Consensus versus Conservation in the Upper ***Colorado*** ***River*** Basin Recovery Implementation Program, 15 Conservation Biology 1001 (2001). [↑](#footnote-ref-212)