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National Interests in Instream Flows

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National interests in water are broad and may include protection of stream flows in some cases. Expression of these national interests may be found in the U.S. Constitution, in statutes enacted by Congress, in actions by agencies implementing these statutes, and in interpretations of law made by the courts. In some instances, an intention to protect flows or levels of water is expressly provided. More often, the need for protection of water is implied from the purpose being pursued.

In general, determinations regarding the use of water are made under state law. Involvement of the federal government in water matters derives primarily from its interest in interstate commerce (including navigation), its role as manager of the public lands, and its regulatory role. In this chapter, we describe a number of national interests in water which have led to the protection of instream flows. These national interests include navigation, hydropower, and interstate commerce; public lands and Indian reservations; and fish, wildlife, recreation and water quality. We discuss the legal sources of these interests and the approaches involving instream flows taken to pursue these interests. Finally, we assess the federal role in instream flow protection.

Navigation, Hydropower, And Interstate Commerce

Waterways long have served as "public highways", essential for travel and for commerce. Relatively early in this country's history the U.S. Supreme Court interpreted the congressional power to regulate commerce enumerated in article I, section 8 of the U.S. Constitution to include control over navigable waterways. Intermittent flows have been involved in the exercise of the navigation power and the broader commerce power.

Initially, the navigation power extended primarily to preventing obstructions of navigable waterways. In the Rivers and Harbors Act of 1890, Congress explicitly required federal approval of any obstruction to the navigable capacity of waterways and prohibited the discharge of refuse which would tend to impede or obstruct navigation. In 1899, the U.S. Supreme Court upheld the use of this authority by the U.S. Government to prevent the construction of a dam in the upper Rio Grande River. Intended to store water for irrigation use, the government
opposed the dam because the consequent reduction in flows would have impaired the downstream navigable capacity of the river.

This federal power to control the placement of obstructions in waterways provided the legal basis for enactment of the Federal Power Act in 1920. This act established a national preference for the use of the nation's waters for hydroelectric generation. It created a federal agency, now called the Federal Energy Regulatory Commission (FERC), and gave it the power to license the construction and operation of dams, water conduits, reservoirs, power houses, or other project works for navigation and for power and development. Such licenses are issued only upon a finding that the proposed project is "best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of commerce."  

National interests in water in this century broadened to include activities beyond those related to navigation. Development of water resources, first for irrigation and then for multiple purposes, became a national objective during much of this century. Concern about the effects of these projects on other values of water, especially protection of fisheries, led to the enactment of provisions (discussed below) aimed at assuring consideration of those values.

In 1982, the U.S. Supreme Court ruled that water is an article of commerce and that state laws restricting interstate transport of water will be subject to review regarding the burden placed on interstate commerce. This decision recognizes the state role in allocating water resources but suggests a strong national interest in water which may limit some kinds of state regulation.

Surface waters flowing between two or more states generally are apportioned by compact or by court decision in the West. An important exception is the Missouri River which originates in Montana and flows into the Mississippi River. A proposal to take water from the Oahe Reservoir on the Missouri River in South Dakota for use in a coal slurry pipeline outside the basin prompted a lawsuit by downstream states concerned that the loss of water would impair navigability in their part of the river. Conflicts between the states regarding the equitable apportionment of interstate waters are resolved under principles of federal common law which have developed in such cases.

Public Lands And Indian Reservations

Nearly one third of the land area of the United States is public land managed by federal agencies. Important water resources exist in these lands but the primary responsibility for the allocation and use of these resources rests with the states in which the lands are located. However, needs for water to accomplish certain purposes related to these lands
have led to the recognition of limited federal consumptive and noncon­sumptive rights to water and caused the land management agencies to seek water and water rights in other ways.

Those public lands reserved for specific purposes have been determined to carry with them the implied right to an amount of water necessary to fulfill the primary purposes of the reservation. This is a right with a priority date as of the time the reservation is established. Reserved water rights have been found to exist in the case of national forests, national parks, national monuments, wild and scenic rivers, and wildlife refuges.

The uses for which reserved water rights exist depend on the primary purposes for which the reservation is established. In *Cappaert v. United States* the U.S. Supreme Court found that the reservation of Devil’s Hole, a deep limestone cavern in Nevada containing a pool of water populated by a species of fish found nowhere else, carried with it the right to preserve groundwater levels necessary to protect these fish. However, in *United States v. New Mexico* the Supreme Court denied a claim to reserved rights for a minimum instream flow for aesthetic, recreational, and fish-preservation purposes in a national forest in New Mexico. Reserved rights in national forests are limited to water necessary to accomplish the primary purposes for which forests are reserved — namely, securing favorable conditions of water flows and furnishing a continuous supply of timber. Recently, the United States has asserted a reserved right for instream flows in national forests to maintain stream channels necessary for securing favorable flows of water.

A federal district court in Colorado has ruled that wilderness areas carry with them reserved water rights necessary to achieve the purposes for which the wilderness areas were established. However, a federal court in New Mexico earlier affirmed a special master’s ruling which found no wilderness reserved water rights. And, in 1988, the Solicitor of the Department of the Interior concluded that Congress did not intend to create federal reserved water rights when it enacted the Wilderness Act. If, ultimately, reserved water rights for wilderness areas are found to have been intended by Congress, minimum stream flows almost certainly will be included within these rights. An important remaining issue will be the quantity of water necessary to accomplish the wilderness objectives.

In contrast to the implied reservation doctrine, Congress may explicitly reserve available water. One consequence of the dispute over wilderness reserved rights has been to force direct congressional consideration of this matter in establishing new reservations. Thus, for example, when establishing the El Malpais National Monument in New Mexico in 1987, the following language was included: “Congress expressly reserves to the United States the minimum amount of water
required to carry out the purposes for which the national monument, the conservation areas, and the wilderness areas are designated in this Act."\(^{21}\) Congress also may explicitly choose to forgo any claims to water. For example, in establishing the Hells Canyon National Recreation Area in 1975 Congress stipulated: "No flow requirements of any kind may be imposed on the waters of the Snake River below Hells Canyon Dam under the provisions of the Wild and Scenic Rivers Act...."\(^{22}\)

The Wild and Scenic Rivers Act declares a national policy that "certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition...."\(^{23}\) Reserved water rights are explicitly recognized in the Act, albeit as Professor Tarlock has stated, "in a back-handed manner...."\(^{24}\) Management of these protected rivers is delegated either to the Department of Agriculture (national forests) or the Department of the Interior (national parks or wildlife refuges).

Federal agencies can acquire water rights under state law for land management purposes.\(^{25}\) Consumptive uses necessary to manage the public lands generally are small, involving things like water needed for agency personnel residing on the public lands, for visitors, and for fire fighting. Agencies needing water for such purposes may seek an appropriative water right from the state in which the lands are located; they may purchase an existing water right or acquire water rights appurtenant to land which they receive as a gift, in an exchange, or otherwise; they may use eminent domain proceedings to obtain a water right in some cases.\(^{26}\)

Federal agencies desiring water rights for instream flow purposes face a more difficult challenge in most states. Almost all western states now provide for the protection of instream flows in some manner. However, the approaches taken vary widely.\(^{27}\) The purposes for which instream flows may be protected typically are limited to protection of fish. The quantity of water protectable is likely to be the minimum necessary to protect the fishery. In some states, instream flow rights or reservations may be limited to state agencies. Because of these limitations in state law, it may be difficult for a federal agency to protect instream flows in the manner it thinks is necessary to fulfill its management responsibilities.

Several states now specifically provide for consideration of federal agency requests or recommendations in their instream flow protection process.\(^{28}\) Only in Alaska, Arizona, and Nevada does it appear that the U.S. can directly hold an instream flow water right not associated with a diversion of water.\(^{29}\) This right in Nevada was recognized in the 1988 case of *Nevada v. Morros*\(^{30}\) which upheld the grant of an instream flow
water right to the United States by the Nevada State Engineer. The Bureau of Land Management had requested an in situ water right for Blue Lake to maintain lake levels for public recreation and fishery purposes. The Nevada Supreme Court noted that Nevada law recognizes recreation as a beneficial use of water and ruled that a water right in Nevada does not require the diversion of water.

In most states, federal agencies apparently would have no legal status to be able to protect instream flows designated by the states. Thus, even if a state agrees to protect flows on public lands there is no guarantee that these flows would continue to be protected. Colorado law now provides for enforceable agreements between the state agency which must handle all instream flow rights and any entity providing "water, water rights, or interests in water" for minimum stream flow purposes. However, this would apply only in circumstances where the federal agency comes with a legal right to use water which it wants to change to instream flow purposes.

The public lands are managed for a broad range of purposes. Moreover, major federal actions on these lands must take full account of their environmental consequences under the National Environmental Policy Act. Instream flows may legitimately be associated with a number of these management actions. However, state laws generally take a restrictive view of the purposes for which instream flows may be established. Instream values recognized in the laws of fourteen western states are shown in Table 1. Protection of fish is the predominant value. Recreation is recognized in a few states. Very few recognize broader ecological values or aesthetics. Thus, there is an apparent disparity between the management purposes of the public lands and state-recognized uses of water.

Federal land management agencies may be able to use their regulatory authority to protect instream flows on public lands. For example, the Forest Service and the BLM both have authority to regulate rights-of-way needed for water development projects on public lands. Grants for rights-of-way may be conditioned to "minimize damage to scenic and aesthetic values and fish and wildlife habitat and otherwise protect the environment...."

Table 1. Instream Values Recognized in Fourteen Western States.

<table>
<thead>
<tr>
<th>State</th>
<th>Instream Beneficial Uses Recognized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>protection of fish &amp; wildlife habitat, migration, and propagation</td>
</tr>
<tr>
<td>Arizona</td>
<td>recreation &amp; wildlife, including fish</td>
</tr>
<tr>
<td>California</td>
<td>preservation &amp; enhancement of fish &amp; wildlife resources</td>
</tr>
<tr>
<td>Colorado</td>
<td>preserve the natural environment to a reasonable degree</td>
</tr>
</tbody>
</table>
The Forest Service used this authority in the Medicine Bow National Forest to require the Cheyenne Board of Public Utilities to maintain minimum stream flows as a condition for obtaining an easement needed for constructing a water project. Although not directly at issue in this case, the use of this authority by the Forest Service was approved in *Wyoming Wildlife Federation v. United States*.

A 1988 California Supreme Court decision concluded that riparian rights attach to federal public lands in that state. In particular, the court ruled that while such rights on public domain lands may be subordinated to the rights of subsequent appropriations as a consequence of the Desert Lands Act, riparian rights on reserved public lands had not been so subordinated. This decision appears to open the way for the Forest Service to exercise its riparian rights for protection of instream flow values. However, it will have to seek approval of the State Water Resources Control Board which must "evaluate the proposed use in the context of other uses and determine whether the riparian use should be permitted in light of the state’s interest in promoting the most efficient and beneficial use of the state’s waters."

The need for water on Indian reservations prompted the original judicial recognition of reserved water rights. The extent of such Indian reserved rights is determined by the primary purposes of the reservation as described in the establishing treaty or order. In *Colville Confederated Tribes v. Walton* the tribes argued that reserved water rights necessary to protect a fishery on the reservation should be granted.
Finding that a primary purpose of the reservation was to preserve the tribe's access to fishing, the Ninth Circuit held that the tribe has "a reserved right to the quantity of water necessary to maintain the Omak Lake fishery."42 Similarly, in the 1983 Adair case the Ninth Circuit found that the reserved rights necessary to fulfill the purposes of the Klamath Reservation included "a quantity of the water flowing through the reservation not only for the purpose of supporting Klamath agriculture, but also for the purpose of maintaining the tribe's treaty right to hunt and fish on reservation lands."43 As the Adair decision noted, the right in this situation consists not in being able to divert and consume water but in being able "to prevent other appropriators from depleting the stream's water below a protected level in any area where the non-consumptive right applies."44 Thus, Indian reserved water rights for instream flow purposes may be found in some circumstances.45

Fish, Wildlife, Recreation, And Water Quality

As the national interest in the protection of fish and wildlife, in recreation, and in water quality has grown during this century, federal policies, programs, and activities have developed to further these objectives. In some cases these federal activities include, either directly or indirectly, the protection of instream flows.

Responsibility for game and fish management rests primarily with state government. National interest in fish and wildlife protection took hold with concern over the inadequacy of state game laws in certain instances and a desire to preserve resources needed by the early settlers of the public lands. Early congressional action in this area sought to establish a single set of rules regulating the hunting and transportation of certain game species.46 In support of these efforts to protect migratory game species, areas of the public lands were set aside as wildlife refuges and as breeding grounds for migratory birds.47 Water necessary for the wildlife protection purposes of these wildlife refuges and reserves was impliedly set aside as of the date the reservation was established.48

With the rapid growth in federal water development activities in the early part of this century, Congress recognized the need to consider effects on fish, wildlife and recreation values. In 1934, it enacted the Fish and Wildlife Coordination Act.49 This Act was strengthened in 1946 to require consultation with the Fish and Wildlife Service "[w]henever the waters of any stream or other body of water are authorized to be impounded, diverted, or otherwise controlled for any purpose whatever by any department or agency of the United States, or by any public or private agency under Federal permit."50 Under this Act, "adequate provision consistent with the primary purposes of such impoundment, diversion, or other control" had to be made for the "conservation,
maintenance, and management of wildlife." In the 1958 Fish and Wildlife Coordination Act, Congress required that wildlife conservation be given "equal consideration" with other objectives of water resources development.

The recreational values associated with these water development projects were recognized by Congress in several different statutes. In 1935, the Federal Power Act was amended to include the requirement that the proposed project be best adapted to a comprehensive plan for developing a waterway for recreational purposes as well as for commerce and navigation. In 1944, Congress authorized the Army Corps of Engineers to construct and operate recreational facilities for boating, swimming, bathing, and fishing at water projects under its control. In the 1965 Federal Water Project Recreation Act, Congress stated its intention that all federal navigation, flood control, reclamation, hydroelectric, or multiple-purpose water projects should provide for outdoor recreation and fish and wildlife enhancement.

Consideration by federal water agencies and by Congress of the need for water to support these non-developmental purposes has resulted in the protection of instream flows in some cases. In Namekagon Hydro Company v. Federal Power Commission, the Seventh Circuit upheld a decision by the Federal Power Commission denying an application for a hydroelectric license because it found that the unique recreational features of the free-flowing Namekegon River were of greater public benefit than the use of the river for water-power development. In State of California v. Federal Power Commission, the Federal Power Commission had attached conditions to a license for a multipurpose project on the Tuolumne River in California requiring releases of specified stream flows determined to be necessary to protect the salmon fishery in the stream. The Ninth Circuit upheld this exercise of authority even in the face of arguments that such a condition could potentially impact the licensee's full exercise of its state-established water rights.

By regulation, the Federal Energy Regulatory Commission requires applicants to submit a report, called an Exhibit E, which must include a description of measures recommended by state or federal agencies for protection of fish, wildlife, and botanical resources. These measures are the outcome of the consultation process provided for by the Fish and Wildlife Coordination Act. FERC may order flow releases or bypass flows based on its own analysis. It is not required to follow the recommendations either of the federal or the state agencies. Nor, apparently, is it required to follow state law concerning water use, including state instream flow law.

The Fish and Wildlife Coordination Act essentially establishes a negotiation process between the Fish and Wildlife Service and the federal agency building or licensing the water project. Often criticized
for its lack of enforceable requirements, nevertheless this law has led to the voluntary creation of stream flow releases and conservation pools in many western water projects.

In the authorization of a few projects, Congress has specifically provided for instream flow protection. For example, in authorizing the Trinity River Project in California, Congress directed the Secretary of the Interior to maintain a specified minimum stream flow "to insure the preservation and propagation of fish and wildlife." The Washoe Project was authorized to include facilities "to permit increased minimum water releases from Lake Tahoe and restoration of the Pyramid Lake fishery." The section of the Flood Control Act of 1962 revising the authorization for the New Melones Project in California required that the Secretary of the Army maintain a minimum flow level in the Stanislaus River.

The National Environmental Policy Act (NEPA) establishes environmental protection as a national policy and directs all federal agencies to carefully consider the effects of any major federal action significantly affecting the human environment. While procedural in nature, the effect of NEPA is to encourage federal agencies to avoid or, at least, to mitigate the adverse environmental consequences of their actions. Thus, for example, federal agencies have required permittees to protect minimum stream flows where determined necessary to offset adverse impacts on fish and other water-related values.

The Endangered Species Act of 1973 prohibits any person from "taking" a protected species, a prohibition which extends to an activity involving significant habitat modification directly injurious to the survivability of such species. In addition, it requires federal agencies to insure that their actions do not jeopardize the continued existence of any protected species or result in the impairment of the designated habitat of such species. On the basis of this authority, the U.S. Supreme Court ruled that a nearly completed dam could not be utilized because it would jeopardize the existence of the protected snail darter. In Riverside Irrigation District v. Andrews, the Tenth Circuit upheld a decision by the Corps of Engineers to deny a nationwide permit for the construction of a dam because of the potential downstream effect on the endangered whooping crane that would result from the increased consumptive use of water essential to the crane's habitat. The need for protection of fish species in the Colorado River endangered by changes in flow regimes caused by dam construction and operation has led to the creation of a Recovery Implementation Program which provides for needed flows of water from Bureau of Reclamation reservoir releases, from purchase and conversion of existing consumptive water rights to instream flow rights, and from other sources.

In 1980, Congress passed the Pacific Northwest Electric Power...
Planning and Conservation Act creating the Northwest Power Planning Council — an eight member body with two representatives from each of the northwest states of Idaho, Montana, Oregon, and Washington. The Council is an interstate compact agency with authority to set policy concerning uses of the Columbia River Basin for hydroelectric power generation and for fish and wildlife protection and enhancement. In 1988, the Council amended its Columbia River Basin Fish and Wildlife Program and its Northwest Power Plan to establish protected stream areas where no new hydroelectric power facilities should be established because of potential adverse effects on fish and wildlife. These protected areas include 44,000 miles of streams in the four states. Under the 1980 Act, both FERC and the Bonneville Power Administration are required to consider fish and wildlife programs adopted by the Council "to the fullest extent practicable." The Council has taken the position that the Bureau of Reclamation and the Army Corps of Engineers also should be guided by the Council's action in establishing protected areas.

Fishable/swimmable water quality has become a national objective under the Clean Water Act. The goal embodied in this act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Emphasis has been placed on controlling discharges from point sources, regulating dredge and fill activities, and subsidizing the construction of municipal wastewater treatment facilities. Attention now is being shifted to protection and enhancement of water quality.

Implementation of this act may, in some circumstances, have the effect of protecting stream flows because of the associated water quality benefits. For example, dredge and fill activities in waters of the U.S. are regulated under Section 404. The 404 permitting process originated with the 1890 Rivers and Harbors Act and involves a broad public interest review by the Corps of Engineers. Dredge and fill activities also must satisfy the 404(b) guidelines aimed specifically at protecting the aquatic ecosystem including wetlands. Mitigation conditions may include protection of stream flows for fish and wildlife needs or for other purposes.

In Riverside Irrigation District v. Andrews, the Fish and Wildlife Service objected to a proposed dam on a small tributary of the South Platte River in Colorado because of possible effects on designated critical habitat for the endangered whooping crane over 250 miles downstream. The court held that both downstream effects of changes in water quantity as well as on-site changes in water quality could be considered under Section 404 of the Clean Water Act.

Renewed attention on protecting and maintaining water quality is reflected in EPA's antidegradation policy. This policy requires that state water quality protection programs not only maintain existing water
quality in their waters at the level necessary for designated uses but also that waters of a quality higher than necessary to support uses for fish, wildlife, and recreation as well as high quality waters in special areas be protected. Maintenance of certain stream flow levels may be necessary to assure non-degradation of water quality.

The Clean Water Act specifically requires that storage for regulation of stream flows be considered in reservoirs being planned by the Corps of Engineers and the Bureau of Reclamation. The need for this storage to provide stream flows for navigation, salt water intrusion, recreation, aesthetics, and fish and wildlife is to be determined by the Corps and the Bureau. The need for storage for water quality control is to be determined by EPA. In addition, EPA is authorized to review FERC license applications for hydroelectric projects to determine if reservoir storage capacity for water quality purposes should be included.

The Federal Role In Instream Flow Protection

National interests in the use and protection of water are broad and varied. As discussed, in some situations these interests may extend to the protection of stream flows. The special federal role in this area has developed largely because these interests either have transcended individual state interests (e.g. interstate commerce, public lands) or because of a perceived need for protection beyond that provided under state law (e.g. fish and wildlife, water quality). In recent years, the western states have begun to provide legal protection for instream flows. Since water resource allocation decisions are made primarily at the state level, this trend might suggest a reduced need for federal involvement. Whether this will in fact be the case depends on the degree to which national and individual state interests converge.

Much of the federal activity related to instream flow protection has concerned fisheries protection, especially in connection with water development projects either federally built or federally licensed. Nearly all western states now provide for protection of stream flows necessary to sustain fish. The Fish and Wildlife Coordination Act assures consultation with state fish and game agencies. Some kind of cooperative procedures also should be established between federal agencies such as FERC or the Corps of Engineers which establish minimum stream flow requirements and the state agency concerned with protecting stream flows under state law. While the final determination regarding the need for certain flows may rest with the federal agency, real protection for these flows can best be achieved by integrating these requirements into the state legal system.

Beyond protection of fish, correspondence of interest between the federal government and the states is less evident. As the "sagebrush
rebellion" indicated, the existence of the federal public lands remains a point of contention with some elements in the West. Many of these same people regard federal and Indian reserved water rights as a direct encroachment on state water rights. Instream water needs associated with management of public lands, whether reserved or not, are likely to meet a mixed reception in many western states. Wilkinson and Anderson argue that the Forest Service has the power to establish instream flows based on "congressional delegation of authority over water resources within the agency's jurisdiction." They urge the use of this authority to establish instream flows on a site-specific and prospective basis following a determination of need in the forest planning process, especially in situations where instream flow protection under state law is unavailable or inadequate.

A preferable approach would be to provide for such needed stream flows under state law. As other chapters in this book illustrate, instream flow protection under state law varies markedly. Although there is now general acceptance of the value of instream flows among the western states and the opportunities for protection are improving, important limitations still exist in most states. The differences between individual state and federal interests in such situations indicate a need to clarify the water management responsibilities of the federal land management agencies.

The reduced federal role in water resources development corresponds to the generally reduced interest in construction of large dams to meet new water demands and to the generally increased interest in protecting the remaining free-flowing stretches of rivers in the West. The opportunities for reorienting the operations of at least some of the storage facilities operated by the Bureau of Reclamation and the Corps of Engineers to provide stream flows in support of things like enhancement of fisheries, of water quality, and of recreation are being examined in a number of places throughout the West. In situations where means can be found to protect existing interests, these opportunities appear to be especially promising.

The federal regulatory role has become much more important in the water area. Professor Tarlock has argued that the Endangered Species Act and the Clean Water Act may, in effect, create federal regulatory water rights. Although such de facto water rights may represent a legitimate exercise of federal power, he argues that things like minimum stream flows which may conflict with existing state allocation decisions "should be a preservation strategy of last resort." In response to these strong national signals of interest in such things as the protection of fish and water quality, some states have adjusted their water laws to provide for instream flow protection and to accommodate these national interests.
In general, national interests and individual state interests related to instream flow protection have tended to converge in recent years. This drawing together of interests suggests that there may be an opportunity for productive coordination in this area. Where possible, national interests should be achieved under state law. As the states more fully embrace the value of instream flows, such coordination should become easier.

Notes

1 For a general discussion of such interests, see MacDonnell, Federal Interests in Western Water Resources: Conflict and Accommodation, 29 Nat. Resources J. (1989 forthcoming).


4 Rivers and Harbors Act, Ch. 907, §10, 26 Stat. 454 (1890); Ch. 907, §6, 26 Stat. 453 (1890). This statute is the origin of the present § 404 of the Clean Water Act requiring a permit for the discharge of any dredge or fill material into any waters. 33 U.S.C. § 1344 (1986).


8 16 U.S.C. § 803(a)(1)(Supp. 1988). This original purpose has been expanded to include protection of fish and wildlife as well as other beneficial uses such as irrigation, flood control, water supply, and recreation. See also, 16 U.S.C. § 797(e)(Supp. 1988) which requires the FERC to give equal consideration to the purposes of energy conservation, protection of fish and wildlife, protection of recreational opportunities, and the preservation of other aspects of environmental quality. See infra notes 59-60 and accompanying text.


   In our view, it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. In truth the authority of the United States is the regulation of commerce on its waters. Navigability ..., is but a part of this whole. Flood protection, watershed development, recovery
of the cost of improvements through utilization of power are likewise parts of commerce control.


11 The final decision in this case focused on the proper federal entity from whom to obtain the water supply contract and did not address the substantive question of whether South Dakota could allocate Missouri River waters for this purpose. ETSI Pipeline Project v. Missouri, 108 S. Ct. 805 (1988).


16 This assertion passed its first important judicial hurdle in United States v. Jesse, 744 P.2d 491 (Colo. 1987). In this case the Colorado Supreme Court held that the U.S. was not precluded as a matter of law from making such a claim and remanded the case to the water court for further consideration.

An explanation of the basis for this claim by the U.S. is provided in an affidavit quoted in the court's opinion:

The United States Forest Service concluded that instream flow requirements for channel maintenance must be based on fundamental principles of fluvial geomorphology which held that natural stream channels are formed and maintained by frequently recurring flows of water and sediment. Consequently, if such flows are not available on a frequent basis, the natural equilibrium of the channel system will be changed, with a resulting loss in the capacity of the channels to carry subsequent flows of equal or greater magnitude. This led us to conclude that instream flows are required to maintain the natural channels in a state of relative equilibrium in order to deliver water to the ultimate user under favorable conditions.

Id. at 499, n.8 (1987).

18 Sierra Club v. Block, 622 F. Supp. 842 (D. Colo. 1985). Judge Kane discussed at some length the purposes of the Wilderness Act which, he concluded, implied a congressional intent to reserve water and then stated: "It is beyond cavil that water is the lifeblood of the wilderness areas. Without water, the wilderness would become deserted wastelands. In other words, without access to the requisite water, the very purposes for which the Wilderness Act was established would be entirely defeated." Id. at 862.

19 State of New Mexico v. Molybdenum Corp. of America, 570 F.2d 1364 (10th Cir. 1978).

20 Solicitor's Opinion M-36914 (Supp. II), Federal Reserved Water Rights in

Pub. L. No. 100-225, 101 Stat. 1539 (1987), § 509(a). Concern that such language would suggest that reserved water rights now must be explicitly recognized by Congress was met by adding: “Nothing in this section shall be construed as establishing a precedent with regard to future designation, nor shall it affect the interpretation of any other Act or any designation made pursuant thereto.” Id. at § 509(c).


Tarlock, Protection of Water Flows for National Parks, 22 Land & Water L. Rev. 29 (1986). The language reads: “Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this chapter, or in quantities greater than necessary to accomplish these purposes.” 16 U.S.C. § 1284(c)(1985).


General federal condemnation authority is found in 40 U.S.C. § 257 (1986). It is to be used to “procure real estate for the erection of a public building or for other public uses,....” The use of this authority to condemn land for public land purposes, such as parks, has been upheld. See, e.g., Shoemaker v. United States, 147 U.S. 282(1893); United States v. Southerly Portion of Bodie Island, 114 F. Supp. 427 (E.D.N.C. 1953). The Federal Land Management and Policy Act limits the eminent domain authority of the Secretary of the Interior to lands required for access. We found no cases involving the use of eminent domain to obtain water rights for public land management purposes. While the general authority may exist, in all likelihood the specific purpose for which the water right is being taken would have to be closely linked to specifically authorized land management activities.

See the chapters describing state programs in Part II of this book.


37 792 F.2d 981 (10th Cir. 1981). The court stated: "The stream flow require­ments were clearly mandated by the Forest Service's own environmental impact statement, which states that the easement's stream flow levels are the minimum necessary to mitigate damage to wildlife habitat." Id. at 986.
39 Id. at 472, 749 P.2d at 337 (1988).
41 647 F.2d 42 (9th Cir. 1981).
42 Id. at 48.
43 United States v. Adair, 723 F.2d 1394, 1410 (9th Cir. 1983).
44 Id. at 1411.
45 The Wyoming Supreme Court ruled that reserved rights for fisheries were not established with the Wind River Indian Reservation. In re General Adjudication of All Rights to Use Water in the Big Horn River System, 753 P.2d 76 (Wyo. 1988). This conclusion was based on the absence of a treaty provision regarding fishing or evidence showing strong historical dependence on fishing.
46 See The Lacey Act of 1900, Ch. 553, 31 Stat. 187 (1900); The Migratory Bird Treaty Act of 1918, Ch. 128, 40 Stat. 755 (1918).
47 By 1910, 44 Executive Orders had withdrawn areas of the public land from entry and set them aside as refuges. Following the passage of the 1929 Migratory Bird Conservation Act, additional reservations were established for the protection and propagation of migratory birds and other wildlife. See, Krulitz Opinion, supra note 14, at 603-04.
49 Act of March 10, 1934, Ch. 55, 48 Stat. 401. This act required consultation with the Bureau of Fisheries prior to construction of a dam and the consideration of the use of impounded waters for "fish-culture stations" and migratory bird uses "not inconsistent with the primary use of the waters." Id. § 3(a), 48 Stat. 401.
50 Act of August 14, 1946, Ch. 965, § 2, 60 Stat. 1080.
51 Id. § 3. Wildlife was defined to include "birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent." Id. § 8.
The language is quite direct: "We therefore conclude that the Commission had authority to incorporate in the federal license a condition which could operate to impair the districts' full use of their irrigation water rights in some future year. The likelihood that circumstances will occur during the next twenty years which will, in fact, present such a problem seem remote. ... But we now hold that the Commission has the legal authority to take appropriate action restricting the use of such irrigation rights, should the occasion arise." Id. at 924.

In First Iowa Hydro-Electric Cooperative v. Federal Power Commission, 328 U.S. 152 (1946), the U.S. Supreme Court ruled that the Federal Power Act preempted a state law requiring the return of diverted waters back to the original stream because of interference with the comprehensive planning responsibility given to the Federal Power Commission (now FERC). In State of Washington Department of Game v. Federal Power Commission, 207 F.2d 391 (9th Cir. 1953) the court upheld the granting of a project license even though the applicant had not obtained a permit to divert water or received approval of the Fisheries and Game departments for protection of fish as required by state law. A recent case squarely presents the issue of whether FERC has exclusive authority to determine minimum stream flow requirements for a licensed project. In Rock Creek Limited Partnership, 38 FERC ¶ 161,240, rehearing denied ¶ 161,514 (1987), the Commission stated:

The imposition of minimum flow releases for fishery protection and other purposes is an integral part of the Commission's comprehensive planning and licensing process under Section 10(a) of the Federal Power Act (FPA). As such, the establishment of minimum flows is a matter beyond the reach of state regulation. Allowing states to prescribe minimum flows for licensed projects would interfere with the Commission's balancing of competing considerations in licensing, such as fishery protection and project economics, and would essentially vest a veto authority over projects in the states.

At 61,772-73. This case has been appealed by the State of California to the federal courts.


For a summary of fish and wildlife protection measures at 146 federal water projects, see Horak, The Status of Fish and Wildlife Mitigation: An Overview, in Proceedings of the Symposium on Mitigating Developmental Impacts on Fish and Wildlife (March 1979). This paper reported that 25 percent of the protection measures requested for these projects involved quantities of water. Id. at 27.


Act of Aug. 1, 1956, Ch. 809, § 3, 70 Stat. 775.

See supra note 37 and accompanying text.


71 758 F.2d 508 (10th Cir. 1985).

Final Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (U.S. Dept. of the Interior Fish and Wildlife Service, Sept. 29, 1987) at 4-1 to 4-11. Congress has appropriated $1 million toward the purchase of water rights to help implement this recovery program.


16 U.S.C. § 839b(h)(11)(A) (1985). There is some dispute over whether the Bonneville Power Administration (BPA) is subject to this standard or the more strict standard found in 16 U.S.C. § 839 b(h)(10)(A)(1985) ("The Administrator shall...protect, mitigate, and enhance fish and wildlife...in a manner consistent with the plan"). See California Energy Resources Conservation and Development Commission v. Bonneville Power Administration, 831 F.2d 1467, 1477 (9th Cir. 1987).

See Protected Areas Amendments, supra note 74.


See text accompanying notes 4-5 supra.


73 758 F.2d 508 (10th Cir. 1985).

40 C.F.R. § 131.12(1987). Provision is made for allowing lower quality (down to that necessary to protect existing uses) in situations where, following a public review, it is found necessary to "accommodate important economic or social development...."


Wilkinson & Anderson, Land and Resource Planning in the National Forests, 64 Or. L. Rev. 1, 232 (1985). Congressional intent to delegate such authority is found in the broad management authority over national forests granted in the 1897 Organic Act, in the specific language asserting a role for "laws of the United States and the rules and regulations established thereunder" in determining use of water in national forests, and in cases upholding expansive use of authority by the Forest Service in managing national forests.


Id. at 29.