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An Agricultural Law Research Article

State Water Laws and Federal Water Uses: The History of Conflict, the Prospects for Accommodation

Part 1

by

D. Craig Bell & Norman K. Johnson

Originally published in ENVIRONMENTAL LAW 21 ENVTL. L. 1 (1991)

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ARTICLE

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By

D. Craig Bell* and Norman K. Johnson**

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The authors initially prepared this article for members of the Western States Water Council, which is an organization representing eighteen states. Council members are appointed by governors to address a broad range of water policy issues. Many of these issues revolve around federal-state relationships in water resources. This Article relies in part upon information provided by Council members. Further, some Council members reviewed a draft of the Article and provided helpful suggestions to the authors. Any errors in the Article, however, are the sole responsibility of the authors.



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I. INTRODUCTION

Western water planning, development, and management have traditionally been carried out under the auspices of state water

law. However, as the examples of conflict and controversy set forth in this Article demonstrate, the federal government has asserted a growing interest in the management of scarce western water resources. As a consequence, traditional state authority has been challenged. State water planning and management must now, more than ever, take place within the constraints imposed by various federal laws and policies.¹

This Article does not intend to suggest that conflicts dominate the federal-state relationship in water resources. Nevertheless, existing conflicts impede the efficient and effective use of the West's limited water resources and should be reduced.² Although the states have the primary authority for allocating water, some tension in the federal-state relationship is inevitable, due mainly to the fact that the federal government is a major landowner and water developer.³ When this tension gives rise to open conflicts, the situation becomes debilitating. The report of the National Water Commission in 1973 described how such conflicts occur:

If [Federal law] fits with the state law into a single pattern, it creates no problems. When it and state law clash, when gaps appear, when federal law upsets that which state law has set up, when federal law undoes the tenure security that states give to property rights, when federal rights override instead of mesh with private rights, then there is a federal-state conflict in the field of water rights. There is confusion, uncertainty, bad feeling, jealousy and bitterness. To a substantial degree, this is what exists today.⁴

A similar statement could be made today. This Article documents some of the conflicts that have arisen between the implementation of certain federal laws and western state water law, describes how state water laws can accommodate federal interests, and evaluates the merits of alternate methods to reduce conflicts in federal-state relationships. It is written from the perspective of

^{1.} See, e.g., Getches, Water Planning: Untapped Opportunity for the Western States, 9 ENERGY L. & POL'Y 1, 12-14 (1988); Tarlock, The Endangered Species Act and Western Water Rights, 20 LAND & WATER L. REV. 1, 2 (1985); NA-TIONAL WATER COMM'N, WATER POLICIES FOR THE FUTURE 459-60 (1973).

^{2.} See NATIONAL WATER COMM'N, supra note 1, at 460-71 (1973); PUBLIC LAND LAW REV. COMM'N, ONE THIRD OF THE NATION'S LAND 141-49 (1970); Muys, Comments on Federal Reserved Water Rights, 54 DEN. LJ. 493 (1977).

^{3.} See Getches, supra note 1, at 14.

^{4.} NATIONAL WATER COMM'N, *supra* note 1, at 459 (quoting F. Trelease, Federal-State Relations in Water Law 11 (1971)).

state representatives and attempts to set forth federal views only to the extent necessary to understand the states' position. Federal views on federal-state relationships in water resources and ways to improve them are amply discussed elsewhere.⁵

II. WATER LAW IN THE WEST

A. Historical Development

Water management in the arid western United States differs from water management in the humid East. Where water is abundant, legal institutions governing its use are geared to enhance navigation and protect against flood. Where water is scarce, however, laws and policies focus on offstream water needs. With some exceptions along the Pacific coast and in the High Plains region, the West is an area of water scarcity where water development is emphasized. Among other things, this involves construction of storage facilities to capture water from spring runoff for use at other times, especially during late summer and fall. Assurance of sufficient water to meet at least some beneficial uses during times of drought is also a concern.

The prior appropriation doctrine developed in response to these western needs. As such, it is an integral part of the history of the West. Early miners applied prior appropriation principles to their use of water.⁶ American Indians, Spanish explorers, and Mormon pioneers were also early appropriators of water in the West.⁷ The gradual recognition of the appropriation doctrine in the statutes of the western territories and states occurred over a period of years. Initially, and through its first phase of development, prior appropriation principles were used to grant water rights to individual holders in what was essentially a "pure property" system, subject only to some publicly prescribed priorities in use. As the prior appropriation doctrine evolved, particularly in

^{5.} See generally Dunn, Cooperative Federalism in the Acquisition of Water Rights: A Federal Practitioner's Point of View, 19 PAC. L.J. 1323 (1988); Kiechel & Burke, Federal-State Relations in Water Resources Adjudication and Administration; Integration of Reserved Rights and Appropriative Rights, 18 ROCKY MTN. MIN. L. INST. 531 (1972).

^{6.} See generally 1 W. HUTCHINS, WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES 159-65 (1971); 1 R. CLARK, WATERS AND WATER RIGHTS 75-78 (1967).

^{7. 1} W. HUTCHINS, supra note 6, at 159-65 (1971).

the last twenty or thirty years, "public rights," or public interest concerns, have received much greater attention.

The underlying prerequisite to an appropriative water right is that water must be put to a publicly defined beneficial use. According to the appropriation doctrine, beneficial use is the limit and extent of the water right. Although the definition of beneficial use changed over time, the necessity of using water beneficially has remained constant.⁸ A related rule is the use-it-or-loseit principle. This rule penalizes nonuse by forfeiture, in order to preclude speculative claims and assure protection of the public interest in the continuous beneficial use of water. Water relinquished by nonuse is returned to the water system and is available for appropriation by others.

Another principle of the appropriation doctrine is that priority is based on the proposition that first in time is first in right. The doctrine thus protects those who put water to beneficial use against impairment of their use by subsequent appropriators. Historically, this element of certainty promoted the investment of capital necessary to develop water supplies. Such development, in turn, was necessary to sustain other social and economic development in the West. It also assured that in times of drought sufficient water would be available to meet some water needs.

An important characteristic of the appropriative water right is that, once vested, it becomes a constitutionally protected property interest which can be sold, leased, or otherwise alienated. This characteristic, like the protection of senior users from encroachment by subsequent users, provides protection to investments. A primary treatise on the water law of the western states says simply, "the basic right of ownership and the divestiture of ownership [of appropriative water rights] was so well established in the early development of the appropriation doctrine in the West, and so consistently confirmed, as to be axiomatic."⁹

^{8.} This requirement is said to be an integral part of appropriative water law because all appropriative rights are usufructuary. In other words, a holder of a vested appropriative water right has the right to use and enjoy a certain volume of water from a given source rather than to own a specific corpus of water.

^{9. 1} W. HUTCHINS, supra note 6, at 468. The right to assign a water right to another user, as described in this quote, is not necessarily the same as the sale of a water right to be put to a different or new use. While the law on water right assignments has become "axiomatic" throughout the West, the law and activity

The appropriation doctrine has often been criticized as outdated, inflexible, or otherwise unable to meet current water resource management needs, particularly the protection of "public values." For example, in 1973 the National Water Commission reported that state laws were "in many instances . . . inadequate to protect important social uses of water."¹⁰ Not all observers would concede that this view was accurate in the early 1970s. But, in any event, all would agree that the states have since modified the appropriation doctrine to enhance public interest protection.

B. Protection of Public Interest Values Under The Appropriation Doctrine

In some ways, the traditional appropriation doctrine succeeded in incorporating public values. A fundamental tenet of prior appropriation law was that land and water estates were separate, and that water could be removed from its natural location and used beneficially elsewhere. This tenet facilitated the public purpose of making an inhabitable region out of arid lands. Also, there were preferred uses under traditional appropriative law. These preferred uses embodied a public sentiment that domestic, municipal, and agricultural needs should be met before water could be put to other uses.

Beyond this, however, traditional appropriative law gave little consideration to which pending applications might better protect public values. In determining whether to grant a water right, the state official merely considered three factors: the date of application, the amount of water available, and the potential damage that the newly created right might do to existing rights. By ignoring other factors, the public interest was often equated with the maximization of potential economic benefit.

1. Public Interest Criteria

Since these early times the western states have significantly enhanced the protection of public interest values.¹¹ Both state

related to other transfers varies from state to state.

^{10.} NATIONAL WATER COMM'N, supra note 1, at 278.

^{11.} See generally Grant, Public Interest Review of Water Right Allocation and Transfer in the West: Recognition of Public Values, 19 ARIZ. ST. L.J. 681 (1987).

legislatures and state courts have established and defined public interest criteria that must be met when an application to appropriate water or to transfer a vested water right is considered. These criteria vary from state to state. Most of the member states of the Western States Water Council have some statutory public interest review provisions in their laws governing new appropriations of water.¹² Several states require consideration of the public interest in determining whether to approve a proposed water right transfer.¹³

Alaska, for example, relies heavily on statutorily defined public interest considerations in evaluating applications to appropriate water. The same criteria apply to both ground and surface water applications and to applications to reserve instream flows.¹⁴ The criteria are:

(1) The benefit to the applicant resulting from the proposed appropriation; (2) the effect of the economic activity resulting from the proposed appropriation; (3) the effect on fish and game resources and on public recreational opportunities; (4) the effect on public health; (5) the effect of loss of alternative uses of water that might be made within a reasonable time if not precluded or hindered by the proposed application; (6) harm to other persons resulting from the proposed appropriation; (7) the intent and ability of the applicant to complete the appropriation; and (8) the effect on access to navigable or public waters.¹⁶

Idaho law requires public interest protection in the consider-

13. See, e.g., Idaho Code § 42-222(1) (1990); Mont. Code Ann. § 85-2-402(3) (1989); Nev. Rev. Stat. § 533.370(3) (1989); N.M. Stat. Ann. §§ 72-5-23, -5-24, -12-7, -12B-1 (1985 & Supp. 1990); N.D. Cent. Code § 61-04-15.1 (1985); S.D. Codified Laws Ann. § 46-2A-12 (1987); Utah Code Ann. § 73-3-8 (1989).

14. Alaska Stat. § 46.15.080(b)(1)-(8) (1989).

15. Id. North Dakota has a similar statutory provision; see N.D. CENT. CODE § 61-04-06 (1985).

^{12.} Alaska Stat. § 46.15.080(b)(1)-(8) (1989); Ariz. Rev. Stat. Ann. § 45-153 (1987); Cal. Water Code § 1225 (West 1971 & 1990 Supp.); Haw. Rev. Stat. § 174C-49(4) (Supp. 1987); Idaho Code §§ 42-203A, 203C (1990); Mont. Code Ann. §§ 85-2-302, -311(2) (1989); Nev. Rev. Stat. §§ 533.325, .370(3), 534.050(1) (1989); N.M. Stat. Ann. §§ 72-5-1, -6, -7, 72-12-3(e) (1985); N.D. Cent. Code §§ 61-04-02, -06 (1985); Or. Rev. Stat. §§ 537.130, .170(4) (1989); S.D. Codified Laws Ann. §§ 46-1-15, -2a-9, -5-10, -6-3 (1987); Tex. Water Code Ann. §§ 11.121, .134(3), .134(4), .147, .150, .152, .1271, .1331 (Vernon 1988); Utah Code Ann. §§ 73-3-1, -8(1) (1989); Wash. Rev. Code Ann. §§ 90.03.250, .03.290, .44.050, .44.060 (1962 & Supp. 1990); Wyo. Stat. §§ 41-4-503, 41-3-930 to -932 (1977 & Supp. 1990).

ation of applications to: (1) appropriate unappropriated water;¹⁶ (2) reallocate water held in trust from some existing hydropower rights;¹⁷ (3) appropriate unappropriated water for minimum instream flow;¹⁸ and (4) change the place or nature of use or point of diversion of an established water right.¹⁹ The Idaho Supreme Court broadly interpreted the term "public interest" to require consideration of numerous variables including assurance of minimum stream flows, encouragement of conservation, protection of aesthetics and the environment, and an assessment of the appropriation's effect upon vegetation, fish, and wildlife.²⁰ The court defined the state legislature's use of the term "local public interest" by saying the legislature "intended to include any locally important factor impacted by proposed appropriations."²¹

A Utah statute requires the state engineer to determine whether approval of an application for a new water use will "unreasonably affect public recreation or the natural stream environment."²² In Nevada, three statutory criteria guide the State Engineer when he considers applications to appropriate water. They are (1) the availability of unappropriated water; (2) the effect on existing rights; and (3) the public interest.²³ The public interest criterion, in the State Engineer's view, protects the public welfare by requiring the exercise of broad discretion when ruling on permit applications.²⁴

Using this discretion, the Nevada State Engineer issued ap-

- 19. Id. § 42-222.
- 20. Shokal v. Dunn, 109 Idaho 330, 338, 707 P.2d 441, 449 (1985).
- 21. Id. at 338-39, 707 P.2d at 449-50.

22. UTAH CODE ANN. § 73-3-8 (1989). In a recent case the Utah Supreme Court held that the public interest criteria which applies to approval of an application to appropriate also applies to an application for change of use. This is a substantial departure from the previous criteria which centered on how the change in use might impair other vested water rights. The court also broadly construed the standing requirement with respect to changes in use, holding that any aggrieved person, not just another water right permittee, has standing to protest a proposed change in use based on public interest criteria. See Bonham v. Morgan, 788 P.2d 479 (Utah 1989).

23. Nev. Rev. Stat. § 533.370(3) (1989).

24. Memorandum letter from Peter G. Morros, Nevada State Eng'r, to Roland D. Westergard, Director, Nevada Dep't of Conservation and Natural Resources (June 12, 1986) (copy on file at the Western States Water Council office).

^{16.} Idaho Code § 42-203A(5)(e) (1990).

^{17.} Id. § 42-203C.

^{18.} Id. § 42-1503.

propriative water rights to the United States Bureau of Land Management and to the United States Forest Service for recreation, fisheries, and wildlife, including instream flow rights. He did so even though the statute used to grant the rights did not clearly define the uses as beneficial and contained no specific authority for recognition of instream flow rights. The Nevada Supreme Court upheld this protection of public interest values by the State Engineer, notwithstanding arguments by the State Department of Agriculture that issuance of nondiversionary appropriative water rights was contrary to the public interest in Nevada.²⁶

These public interest statutes have had an important effect upon western water resource management. For example, Wyoming law requires rejection of applications to appropriate water that are detrimental to the public interest or welfare.²⁶ Recently the State Engineer evaluated two opposing applications to construct a reservoir and develop water on the same site. The application filed first by a private corporation would have provided industrial water and incidental municipal supply. A subsequent application, filed by the Wyoming Department of Economic Planning and Development, intended to supply a larger share of municipal water.

Based on public interest considerations, the State Engineer denied the initial application in favor of the state agency's application.²⁷ The original applicant appealed the matter to the Wyoming Supreme Court, which remanded it to the State Board of Control.²⁸ The initial applicant then signed over its project development rights to the Wyoming Water Development Commission, which settled the matter. Although the State Engineer's decision cleared the way for the state project, the state agency still had to perfect its application and meet all requirements of Wyoming

28. Wyoming Water Inc. v. Christopulos, No. 86-177 (Wyo. Sup. Ct. Dec. 3, 1987) (Summary Order of Remand).

^{25.} Nevada v. Morros, 766 P.2d 263 (Nev. 1988).

^{26.} WYO. STAT. § 41-4-503 (1977).

^{27.} The public interest considerations included, among other things, lack of due diligence and the concerns with the applicant's intent and ability to develop the project. See letter from George L. Christopulos, Wyoming State Eng'r, to David H. Carmichael and others (Dec. 3, 1985) (petition to initiate a proceeding against and seek rejection of the application of Wyoming Water, Inc., for a permit to construct a reservoir on Deer Creek, a tributary to the North Platte. Temporary Filing No. 21 6/198) (copy on file at the Western States Water Council office).

law, including public interest criteria.

Arizona statutes require the Department of Water Resources Director to consider the potential effect on the public interest and welfare when considering applications to use surface water. The Director must reject such applications where a proposed use is contrary to public values.²⁹ The Arizona State Land Department (the predecessor to the Arizona Department of Water Resources which reviewed water appropriation applications) used public interest criteria to deny an application which, if granted, would have resulted in the loss of 1.7% of the total recharge of one of Arizona's ground water basins.³⁰

The State Land Department determined that it would not have been in the public interest to place additional strain on a source of ground water supply experiencing substantial overdraft.³¹ The Arizona Court of Appeals upheld the denial of the application. It emphasized that, in a water short area, even a small reduction in recharge might cause substantial injury to the public welfare, particularly if followed by additional reductions.³²

2. Instream Flow Laws

Public interest protection in western water resource management is also enhanced by establishing and maintaining instream flows. The traditional law of prior appropriation favored offstream uses. However, instream flows were indirectly protected. Longtime New Mexico State Engineer, Steve Reynolds, observed:

The streamflow required at various points in the State is governed by interstate compacts, international treaties, federal court decrees, water rights conferred by the state . . . and legislation authorizing federal water development projects. In many situations, an incidental effect of these institutional constraints is an instream flow having important value in terms of recreation, fish and wildlife habitat, and aesthetics. Furthermore, in many areas of the state the geography and public land ownership patterns adequately protect instream values. Mountain streams generally do not provide favorable sites for conservation, storage, and beneficial use of

- 31. Id. at 30, 535 P.2d at 622.
- 32. Id. at 31, 535 P.2d at 623.

^{29.} Ariz. Rev. Stat. Ann. § 45-153(A) (1987).

^{30.} Arizona Game & Fish Dep't v. Arizona State Land Dep't, 24 Ariz. App. 29, 535 P.2d 621 (1975), reh'g denied (1979).

water.³³

Reynolds' comments describe the incidental "base-line" of instream flow protection under the appropriation doctrine. His comments also apply to states other than New Mexico. In addition, the western states have established instream flows to enhance preservation of public values in water resource management. Instream flow establishment provides water for fish, wildlife, recreation uses, and aesthetics. In every western state, legal mechanisms are now in place to provide some protection for instream flows.

Instream values are protected in California where public interest statutes form a legal basis to protect "use of water for recreation and preservation and enhancement of fish and wildlife resources [as] a beneficial use of water."³⁴ However, a diversion or impoundment of water must be made to establish an appropriative right to effect protection of instream values. For example, the state might grant a right to impound water for use downstream to enhance fish and wildlife habitat. Such a right could be issued to a public or a private entity.³⁵ A state agency may also protect instream flows in California, Oregon, and other states, under state public interest statutes that allow terms and conditions to be included in appropriative rights to maintain bypass flows.³⁶

These provisions affect water appropriation for instream uses in various ways. First, the state agency may disallow new appropriations where wildlife or aesthetic values would be harmed. Second, the state agency may allow new appropriation only where a by-pass flow can be assured. Further, the state agency may disallow a transfer proposal if it is detrimental to the public interest. A state agency or, in some instances, a private party protesting the transfer may assert the proposed transfer's detrimental effect on the public interest.

36. CAL. WATER CODE § 1243.5; OR. REV. STAT. § 537.170 (5)(a) (1989). See supra text accompanying notes 11-32.

^{33.} Memorandum by Steve Reynolds at 4, Re: House Bill 228 (Feb. 7, 1977) (State Engineer Files, Santa Fe, New Mexico) *quoted in* INSTREAM FLOW PROTEC-TION IN THE WEST 334 (L. MacDonnell, T. Rice & S. Shupe, ed. 1989).

^{34.} CAL. WATER CODE § 1243 (West 1971 & 1990 Supp.).

^{35.} California also recognizes limited riparian rights, which may be similar to appropriative rights for instream flows in some instances. See In re Matter of Hallett Creek Stream Sys., 44 Cal. 3d 448, 749 P.2d 324, 243 Cal. Rptr. 887 (1987), cert. denied 109 S.Ct 71 (1988).

In Montana, a public entity may acquire a water reservation to secure the equivalent of a right for instream flow. The law provides that reservations for the "maintenance of minimum flow, level, or quality of water [may be made up] to a maximum of 50% of the average annual flow of . . . gauged streams."³⁷ Laws in California,³⁸ Oregon,³⁹ and Washington⁴⁰ also provide for water reservation by a state agency, or a similar process.

Wyoming considers instream flow and water storage for later release to maintain instream flow to be beneficial uses under certain conditions, and established a procedure for appropriating water for such uses.⁴¹ The Game and Fish Commission identifies stream segments and flow rates that should be appropriated and reports them to the Water Development Commission which then files an application to appropriate natural flow after analyzing whether natural flow is available, whether storage is required, or whether a combination of both must be used. The appropriative right's priority date is the Water Development Commission's application date. Water commissioners regulate the water course to provide water for the instream use on the basis of its priority.⁴²

Utah enacted a similar statute.⁴³ The state may acquire established water rights to provide "water for instream flows in natural channels necessary for the preservation or propagation of fish

.39. OR. REV. STAT. § 536.410 allows the Water Resources Commission to withdraw waters from further appropriation while the order of withdrawal is in effect. This is somewhat different from the reservation concept in Montana, which involves reservation of a quantity of water with a priority date. Any Oregon state agency may request a reservation of unappropriated water for future economic development under OR. REV. STAT. §§ 537.356, .358. As to instream flow protection, Oregon has a minimum stream flow program authorized by OR. REV. STAT. § 536.325. As a practical matter, the minimum streamflow program has been largely supplanted by the Water Resources Commission's instream water rights program.

40. WASH. REV. CODE ANN. § 90.22.010 (1962 & Supp. 1990).

42. Id.

^{37.} Mont. Code Ann. § 85-2-316 (1989).

^{38.} See Lilly, Protecting Stream Flows in California, 8 ECOLOGY L.Q. 697 (1979). The use of the term "reserve" in this context refers to the state setting aside, or "reserving" from appropriation, sufficient water to assure maintenance of instream flows and should not be confused with federal "reserved water rights" recognized under the "reserved rights" doctrine. See infra notes 233-54 and accompanying text (§ III(C)(6)) (1989).

^{41.} See Wyo. STAT. §§ 41-3-1001 to -1014 (Supp. 1990).

^{43.} UTAH CODE ANN. § 73-3-3(11) (1989).

within a designated section of a natural stream channel."⁴⁴ In Colorado, the Water Conservation Board may appropriate "such waters of natural streams and lakes as the Board determines may be required for minimum stream flows or for natural surface water levels or volumes for natural lakes to preserve the natural environment to a reasonable degree."⁴⁵

Idaho law provides two methods to protect instream flows for public use. First, applications to appropriate water for out-ofstream purposes must be evaluated against broad "local public interest"⁴⁶ criteria, which include a determination of minimum streamflow to be retained in the natural channel. Second, a minimum instream flow may be assured by establishing a recorded right for the flow. The Idaho Water Resources Board, an eightmember citizen policy commission, is authorized under state law to apply for and hold such rights.⁴⁷ The Idaho Supreme Court affirmed the validity of instream flow rights. The court recognized some instream public uses as beneficial uses under state law.⁴⁸

Oregon protects instream flows in a variety of ways. One is legislative⁴⁹ or administrative⁵⁰ withdrawal of streams from further appropriation. In 1983, Oregon also administratively established minimum streamflows to support aquatic life and minimize pollution.⁵¹ In 1987, the Oregon legislature explicitly authorized instream water rights, largely superseding the state's minimum streamflow program.⁵² The Oregon Departments of Fish and Wildlife, Environmental Quality, and Parks and Recreation may apply for instream water rights for public use.⁵³ Public uses include "(a) recreation; (b) conservation, maintenance and enhancement of aquatic and fish life, wildlife, fish and wildlife habitat and any other ecological values; (c) pollution abatement; or (d)

44. Id.

45. COLO. REV. STAT. § 37-92-102(3) (Cum. Supp. 1987).

46. Idaho Code § 42-203A(5) (1990).

47. Id. § 42-1503.

48. State Dep't of Parks v. Idaho Dep't of Water Admin., 96 Idaho 440, 444-45, 530 P.2d 924, 928-29 (1974).

49. Or. Rev. Stat. §§ 538.010-.300 (1989).

50. Id. § 536.410.

51. Act of Aug. 8, 1983, ch. 796, § 2, 1983 Or. Laws 1534 (codified as amended at Or. Rev. Stat. §§ 536.235, .325).

52. Act of July 18, 1987, ch. 859, § 2, 1987 Or. Laws 1757 (codified at Or. Rev. STAT. §§ 537.332-.360).

53. OR. REV. STAT. § 537.336.

navigation."⁵⁴ The Water Resources Commission holds instream water rights in trust for the people of the state.⁵⁵ The Commission converted most of the earlier established minimum streamflows to instream rights.⁵⁶

In 1949, the Washington legislature declared "that a flow of water sufficient to support game, fish and foodfish populations be maintained at all times in the streams of [the] State."⁸⁷ The Director of the Department of Ecology may refuse to issue permits where instream flow needs would be harmed.⁵⁸ Rather than denying permits, the Department often issues them with conditions protecting instream flows. Also, Washington law provides a more formal process to protect instream flows. The Department of Ecology, on its own or when requested by the Department of Fisheries or the Game Commission, may establish minimum streamflows and lake levels to protect fish and wildlife resources, recreation, or aesthetic values.⁵⁹

Further, Washington's Water Resources Act of 1971 provides that "[p]erennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values."⁶⁰ Between 1975 and 1985 the Department secured instream flows for a substantial area of the state under the administrative process established pursuant to the 1971 Act.⁶¹

In Alaska, the Water Use Act allows for the reservation of water for the following instream uses: "(1) protection of fish and wildlife habitat, migration, and propagation; (2) recreation and park purposes; (3) navigation and transportation purposes; and (4) sanitary and water quality purposes."⁶² The statute authorizes local, state, and federal agencies, and private individuals to apply for reservations for instream uses. To aid private entities, the

60. Id. § 90.54.020(3)(a).

61. WASH. ADMIN. CODE § 173-500 (1989) (Water Resources Management Program established pursuant to the Water Resources Act of 1971).

62. Alaska Stat. § 46.15.145(a)(1)-(4) (1987).

^{54.} Id. § 537.332(4).

^{55.} Id. § 537.341.

^{56.} Id. § 537.346.

^{57.} Fisheries Code, ch. 112, § 46, 1949 Wash. Laws 272 (codified at WASH. REV. CODE ANN. § 75.20.050 (1962 & Supp. 1990)).

^{58.} Id.

^{59.} Id. § 90.22.

state published a booklet describing the instream flow reservation program, including instructions on how to apply for a reservation.⁶³

There are a few states where instream flow appropriations or their equivalent are not recognized by statute. Nevertheless, state administrators may provide protection pursuant to public interest provisions.⁶⁴ For example, in Arizona and Nevada, state officials have interpreted their laws requiring a diversion to establish a water right to allow for *in situ* (instream) water use. The Arizona Court of Appeals held that state statutes authorize *in situ* appropriations for recreation and wildlife purposes.⁶⁵ The Arizona Department of Water Resources issued three permits to appropriate water for instream use: two permits to the Nature Conservancy in April 1983, and one permit to the federal Bureau of Land Management in March 1989.⁶⁶

In Nevada, the State Supreme Court upheld the State Engineer's issuance of appropriative water rights to two federal agencies for recreation, fishery, and stock and wildlife watering purposes, including instream rights.⁶⁷ The court said: "[A]pplications by United States agencies to appropriate water for applications to beneficial uses pursuant to their land management functions must be treated on an equal basis with applications by private landowners."⁶⁸ Thus, instream rights were provided for use on federal lands under state regulatory authority, not federal proprietary claims. These rights will enjoy the protection of state law and will be integrated into the regimen of rights administered by the State Engineer.

3. Water Transfers

Transfers may also promote the public interest by allowing

^{63.} Alaska Dep't of Natural Resources, State of Alaska Instream Flow Handbook - A Guide To Reserving Water For Instream Use (1985).

^{64.} See generally Grant, supra note 11.

^{65.} McClellan v. Jantzen, 26 Ariz. App. 223, 225, 547 P.2d 494, 496 (1976).

^{66.} Letter from Kathleen Ferris, Director, Arizona Dep't of Water Resources to Norman K. Johnson (June 20, 1986) (copy on file at the Western States Water Council office); telephone conversation between Laurence Linser, Arizona Dep't of Water Resources, and Norman K. Johnson (Dec. 19, 1989).

^{67.} Nevada v. Morros, 766 P.2d 263 (Nev. 1988).

^{68.} Id. at 269.

established uses to change with evolving values and needs. The ability to make such transfers was recognized early in the development of the prior appropriation doctrine.⁶⁹ As used here, "transfer" refers to the conveyance of a water right from one user to another involving a change in the location or type of use.

The interrelated nature of appropriative water rights requires state agencies to play an active role in the water right transfer process. Generally, before a transfer may proceed, a "change" or "transfer" application must be filed with and approved by a state administrative body or a state water court. This gives third parties the opportunity to protest the transfer if they believe it may harm their rights. Usually a state agency or court must also determine whether the transfer will be in the public interest.⁷⁰

A transfer application is either approved or disapproved after a time period for objections by third parties and a state agency's consideration of the transfer implications. Historic consumptive use is generally the quantity of water that may be transferred. The state agency's decision is usually subject to judicial review. Complex transfers, with the potential to affect a number of vested rights, can be costly and time consuming, while simple transfers are routine in many states.⁷¹ Most states recognize instream flows as a beneficial use to which water may be transferred. However, in some states only state entities are authorized to obtain transfer approval of a diversionary water right to an instream right.⁷²

According to a 1986 survey by the Western States Water Council, the annual number of transfers varies significantly from state to state. Water rights are rarely transferred in Alaska, Nebraska, and North and South Dakota, while water rights are transferred frequently in other states. Colorado, Idaho, Nevada, New Mexico, Utah, Washington, and Wyoming reported that fifty or more transfers occur annually. Colorado, Nevada, and Utah re-

71. Id.

72. Id.

^{69.} See McDonald v. Bear River & Auburn Water & Mineral Co., 13 Cal. 220, 232-33 (1859); Thayer v. California Dev. Co., 164 Cal. 117, 128 P. 21 (1912).

^{70.} A matrix summarizing state-by-state water right transfer information is included in Western Governors' Ass'N WATER EFFICIENCY WORKING GROUP, WATER EFFICIENCY: OPPORTUNITIES FOR ACTION, REPORT TO THE WESTERN GOVERNORS app. at 136 (1987).

ported that more than 300 transfers occur each year.73

Recently, some states have simplified the marketing of water rights. In 1979, Idaho formalized some types of water transfer activities by creating a water bank for marketing purposes.⁷⁴ The bank "provide[s] a source of adequate water supplies to benefit new and supplemental water uses, and provide[s] a source of funding for improving water user facilities and efficiencies."⁷⁵ The Idaho Water Resource Board operates the bank on a statewide basis and appoints committees in local drainage areas. Farmers "deposit" water held under private rights or by allocations in federal reservoirs into either the state or the local water bank, where it may be leased by other water users.

The California legislature adopted a policy to encourage transfers. It directs the Department of Water Resources, the State Water Resource Control Board, and other appropriate state agencies "to encourage voluntary transfers of water and water rights, including, but not limited to, providing technical assistance to persons to identify and implement water conservation measures which will make additional water available for transfer."⁷⁶ The legislature also requested the Department of Water Resources to establish a program to facilitate the voluntary exchange of water rights and to report legal and procedural changes that could be made to facilitate water marketing. Further, the Department must prepare and update a "water transfer guide" and create and maintain a periodically updated list of entities seeking to enter water transfer, lease, or exchange agreements.⁷⁷

4. Other Developments

The western states have acted to protect public interest values in various other ways.⁷⁸ For example, Colorado expanded the

78. Although this Article focuses on state water quantity laws, western states have also become increasingly active in water quality protection. Many surface water pollution control efforts occur under provisions of the federal Clean Water

^{73.} Id. See also L. McDonnel, The Water Transfer Process as a Management Option For Meeting Changing Demands (Report prepared for the U.S. Geological Survey, 1990).

^{74.} See Idaho Code § 42-1761 (1990).

^{75.} Id.

^{76.} CAL. WATER CODE § 109(b) (West 1971).

^{77.} Id. §§ 470-483 (West 1989).

state role in the administration of appropriative water rights, with an increased recognition of the State Engineer's discretion to make rules governing water use. Instead of being guided by the priority of application alone, the Engineer can formulate rules to optimize water use.⁷⁹ The courts have expanded this principle, indicating that "maximum utilization" does not require a "singleminded endeavor to squeeze every drop of water" from a water source, but to make "optimum use" of the resource.⁸⁰

Also, the State Engineer more strictly enforces the due dili-

In addition to state and federal efforts to mitigate surface water pollution under federal law, every state has acted to protect ground water quality. See WESTERN STATES WATER COUNCIL, WESTERN STATE GROUND WATER MANAGEMENT (1986). The states continue to enhance their legal protection of ground water quality. The U.S. Environmental Protection Agency reported in 1989 that 37 states enacted ground water legislation during the period 1985-1987, with 27 states enacting underground storage tank programs and 25 enacting legislation to protect ground water from contamination by agricultural chemicals. Twelve states enacted comprehensive statewide ground water protection strategies. See U.S. ENVIRON-MENTAL PROTECTION AGENCY, SURVEY OF STATE GROUND WATER QUALITY PROTEC-TION LEGISLATION ENACTED 1985-1987, at vii-xi (1989).

States have also expanded upon federal legal protection for surface water. Many states establish standards more stringent than national standards to protect public drinking water supplies, for purposes of secondary wastewater treatment, and with respect to baseline water quality. States have also acted independently of federal law to control water pollution by establishing (1) underground storage tank programs (see, e.g., ARIZ. REV. STAT. ANN. §§ 49-1001 to -1014 (1988 & Supp. 1989); MONT. CODE ANN. §§ 75-10-403 to -451 (1989); and S.D. CODIFIED LAWS ANN. § 34A-2-98 to -99 (1987)); (2) chemigation controls (see, e.g., CAL. FOOD & AGRIC. CODE § 13145 (West 1986); COLO, REV. STAT. § 35-11-106 (Supp 1989); N.D. CONT. CODE § 4-35.1-03 (1987)); (3) pesticide controls (see, e.g., ARIZ. REV. STAT. ANN. §§ 49-301 to -309 (1988); and CAL. FOOD & AGRIC. CODE §§ 13141 - 13152 (West 1986)); and (4) critical ground water management areas (see, e.g., Colo. Rev. STAT. § 37-90-106 (1973 & Supp 1989); IDAHO CODE § 42-233 (1990); OR. REV. STAT. § 537.730 (1989)), among other water quality programs. States have also created state superfunds and programs to control hazardous waste and toxic substances. See Begley, Hager, Wright, Springen, Hutchison, de la Pena & Murr, E pluribus, pluries: Without Leadership from Washington, the States Set the Environmental Agenda for the Nation, Newsweek, Nov. 13, 1989, at 70.

79. See Fellhauer v. People, 167 Colo. 320, 336, 447 P.2d 986, 994 (1968); Colorado Springs v. Bender, 148 Colo. 458, 464, 366 P.2d 552, 556 (1961).

80. Alamosa-La Jara Water Users Protection Ass'n v. Gould, 674 P.2d 914, 935 (Colo. 1983).

Act (CWA), 33 U.S.C. §§ 1251-1377 (1988), which allows states to attain primacy for carrying out the most important federal water pollution control programs. *Id.* § 1342. The CWA recognizes "the primary responsibilities and rights of States" to mitigate and control water pollution. *Id.* § 1251(b).

gence requirements relating to the acquisition of conditional water rights. In the past, conditional rights, those established by declaring an intent to divert water without making a diversion, have sometimes been maintained for many years with only minimal physical effort or investment. Colorado courts have imposed stricter requirements.⁸¹ Thus, the water courts are scrutinizing such rights to insure that there is a genuine intent to appropriate, not merely speculate.⁸² Further, Colorado law⁸³ now requires proof that a project will be completed with diligence before a decree for a conditional right can be issued.⁸⁴ Imposing stricter requirements on conditional rights makes more water available for current demands to meet present economic uses.

In 1987, Oregon enacted a law to provide for the sale or lease of "conserved water."⁸⁵ The law defines "conserved water" as "that amount . . . previously unavailable to subsequent appropriators, that results from conservation measures."⁸⁶ "Conservation" is defined as "the reduction of the amount of water [previously] consumed or irretrievably lost . . . achieved either by improving the technology or method for diverting, transporting, applying or recovering the water or by implementing other improved conservation measures".⁸⁷ Any water right holder may apply to the Water Resources Commission for approval to implement conservation measures.

In evaluating the applications, the Water Resources Commis-

85. Or. Rev. Stat. §§ 537.455-.500 (1989).

86. Id. § 537.455(2).

^{81.} Colorado River Water Conservation Dist. v. City & County of Denver, 640 P.2d 1139 (Colo. 1982).

^{82.} See, e.g. Colorado River Water Conservation Dist. v. Vidler Tunnel Water Co., 197 Colo. 413, 417, 594 P.2d 566, 568 (1979).

^{83.} COLO. REV. STAT. § 37-92-305(9)(b) (Cum. Supp. 1987).

^{84.} See Southeastern Colorado Water Conservancy Dist. v. City of Florence, 688 P.2d 715, 718 (Colo. 1984); see also Talco Ltd. v. Danielson, 769 P.2d 468 (Colo. 1989).

^{87.} Id. § 537.455(1). The Washington legislature enacted a somewhat similar program which allows the state Department of Ecology to assist the water right holders in the Yakima River Basin in the financing of water conservation projects. See WASH. REV. CODE ANN. §§ 90.38.005-.902 (1962 & Supp. 1990). The conserved water then becomes a "trust water right" which is conveyed to the Department of Ecology to increase the state's overall ability to manage water in the Yakima Basin. Id. § 90.38.030. The statute may be expanded in the next legislative session to cover the entire state.

sion must consider whether the project would be feasible, whether the public interest would be served, if any injury would accrue to other vested water rights, and if the project adequately mitigates effects on other water users. The Commission allocates a percentage of the water proposed to be conserved to the applicant (usually seventy-five percent), and a percentage (presumed to be twenty-five percent unless reasons dictate a lesser or greater percentage) to the state.⁸⁶

After the applicant successfully carries out the conservation project, the Commission determines the amount of conserved water and issues a new water right certificate to the conserving party for that party's percentage of the water.⁸⁹ The certificate contains a priority to the conserved water "one minute after the priority of the water right held by the person implementing the conservation measure."⁹⁰ This law encourages water conservation and protects the public interest by allowing a water user not only to benefit from his conservation measures, but at the same time, to increase water available for other public uses. Any person or agency allocated conserved water may reserve the water instream for future out-of-stream use or otherwise use or dispose of conserved water.⁹¹

5. Public Trust Doctrine

Public interest values in western water resource management are also protected by the public trust doctrine. This doctrine is based on ancient common-law principles forcefully articulated in the United States Supreme Court's 1892 decision in *Illinois Central Railroad. v. Illinois.*⁹² In *Illinois Central*, the Illinois legisla-

91. Id. § 537.490. Oregon is also formulating a policy to expand the state's longstanding prohibition of waste in water use to require water users to employ best practicable technology to assure maximum efficiency. Public hearings on the subject are currently being held. The hearings have been well-attended and interest in the subject has been high. See remarks by William Young, Director, Oregon Water Resources Dep't, Meeting of the Western States Water Council (July 13, 1990) (included as part of the minutes on file at the Western States Water Council Office). Washington State is considering similar actions. See id. remarks by Ken Slattery, Washington Dep't of Ecology.

92. 146 U.S. 387 (1892).

^{88.} Id. § 537.470.

^{89.} Id. § 537.475.

^{90.} Id. § 537.485.

ture had conveyed to the railroad company the bed of Lake Michigan bordering Chicago. Subsequently, the legislature reviewed its action and rescinded the conveyance. The railroad brought a quiet title suit to settle its ownership of the harbor bed. The Supreme Court, relying on Illinois's sovereign power over navigable waters, ruled that the legislature could revoke the conveyance because it had been made initially in violation of the public trust. The ruling initially appeared to be based on federal common law. In a later case, however, the Court stated that the *Illinois Central* decision was based on Illinois state law.⁹³

Many western state courts have recognized the public trust doctrine.⁹⁴ Among the various public trust cases, National Audubon Society v. Superior Court (Mono Lake),⁹⁶ and United Plainsmen v. North Dakota State Water Commission⁹⁶ are important to a basic understanding of the effect the public trust doctrine may have on state systems of water resource management.⁹⁷

In Mono Lake, the California Supreme Court held that the state can balance environmental water uses against other uses in California, and concluded that the public trust doctrine exists apart from the appropriation doctrine. The court found that the need for public trust protection provides a procedural tool to reexamine and, in some instances, retroactively modify vested appropriative water rights to protect the public trust. The operation of the public trust doctrine as described in Mono Lake was spe-

95. 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983).

96. 247 N.W.2d 457 (N.D. 1976).

97. For an excellent analysis of the relationship between the public trust doctrine and western water resource management see generally Walston, The Public Trust Doctrine in the Water Rights Context: The Wrong Environmental Remedy, 22 SANTA CLARA L. REV. 63 (1982), and Walston, The Public Trust Doctrine in the Water Rights Context, 29 NAT. RESOURCES J. 585 (1989).

^{93.} Appleby v. City of New York, 271 U.S. 364, 395 (1926).

^{94.} See Department of State Lands v. Pettibone, 216 Mont. 361, 702 P.2d 948 (1985); National Audubon Soc'y v. Superior Court, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983) (Mono Lake); Kootenai Envtl. Alliance v. Panhandle Yacht Club, 105 Idaho 622, 671 P.2d 1085 (1983); Morse v. Oregon Div. of State Lands, 34 Or. App. 853, 581 P.2d 520 (1978); United Plainsmen Ass'n v. North Dakota State Water Conservation Comm'n 247 N.W.2d 457 (N.D. 1976); State v. Lain, 162 Tex. 549, 349 S.W.2d 579 (1961).

cifically adopted by at least one other state court.⁹⁶

In United Plainsmen, the North Dakota Supreme Court declared that, with respect to water resource management, a state statute⁹⁹ expressed the public trust doctrine. The court found that state statutory and constitutional laws establish a policy in favor of long-term water planning. The court also found that the public trust doctrine confirms the state's role as trustee of its water resources and complements constitutional and statutory authority, but does not impose an independent obligation on the state that requires continual review of vested appropriative water rights.¹⁰⁰

These and other rulings indicate that although the public trust doctrine is likely to exist in every state, each state may interpret it differently. Thus, western states are obligated to give adequate consideration to public trust interests in their administration and management of western water resources.¹⁰¹ This is so even where the public trust doctrine is currently latent. These water resource uses, however, are not the same in every state. To the contrary, they may differ depending on climate, economics, hydrology, traditional water and land use patterns, and a variety of other factors. Further, the public trust compels no particular decision in any given water use situation. It is neutral as to the choices states make, but it requires that public trust uses and values be given adequate consideration when the choices are made.

Where public trust uses have received inadequate protection, the public trust doctrine may provide a basis for challenging the resulting neglectful decisions. However, United Plainsman confirms the theory that some state systems of water law, as they presently function, may adequately protect the public trust. Where state water allocations inadequately protect public trust uses and values, the public trust doctrine may provide a tool to modify such allocations.

^{98.} Kootenai Envtl. Alliance, 105 Idaho at 630-32, 671 P.2d at 1093-94.

^{99. 247} N.W.2d at 461 (citing N.D. CENT. CODE § 61-01-01 (1985 & Supp 1989)).

^{100.} Id. at 463.

^{101.} See Littleworth, The Public Trust vs. The Public Interest, 19 PAC. L.J. 1201, 1207-12 (1988).

C. Summary

The appropriation doctrine has evolved in the West to protect and enhance public interest values. This is accomplished primarily pursuant to (1) provisions requiring consideration of the public interest in water allocation and transfer decisions; (2) laws and programs to enable establishment of instream flows and protection of instream values; and (3) provisions and policies to facilitate and encourage water transfers. These measures are supplemented in varying degrees by the public trust doctrine.¹⁰²

The federal government has also moved to protect and enhance public interest values in western water resources, as defined for its purposes by federal public land and environmental laws. These federal efforts, however, have often resulted in conflicts with western state water law systems, as the following Section shows.

III. STATE WATER LAWS VERSUS FEDERAL WATER USES: THE HISTORY OF CONFLICT

A. Background

The principles of western water law were developed before the establishment of formal government. Custom and tradition gave rise to these principles in western mining camps in the late 1840s and early 1850s.¹⁰³ When mineral development occurred elsewhere, the laws of the California miners spread to other areas.¹⁰⁴ Eventually, the western states and territories codified these principles as part of their statutory laws.¹⁰⁵

Congress took a fundamental step in deference to state and territorial water law with the passage of the Mining Act of 1866.¹⁰⁶ With this law, Congress confirmed water rights for min-

^{102.} For additional information on protection of the public interest in western water resource management through statutory provisions, instream flow laws, water transfers, and the public trust doctrine, see Johnson & DuMars, A Survey of the Evolution of Western Water Law in Response to Changing Economic and Public Interest Demands, 29 NAT. RESOURCES J. 347 (1989).

^{103.} See 1 W. HUTCHINS, supra note 6, at 159-63 (1971).

^{104.} See Maynard v. Watkins, 55 Mont. 54, 55, 173 P. 551, 552 (1918).

^{105.} See 1 W. HUTCHINS, supra note 6, at 164-65.

^{106.} Act of July 26, 1866, ch. 262, § 9, 14 Stat. 251 (current version at 43 U.S.C. § 661 (1988)).

ing, agriculture, and other uses that had been acquired by private parties on public land under local customs, laws, and court decrees. This occurred even though many of the appropriators were trespassers on federal land.

In the Desert Land Act of 1877, Congress declared that "the right to the use of [western states'] waters by claimant[s under the Act] shall depend upon bona fide prior appropriation."¹⁰⁷ Thus, Congress reconfirmed past and future appropriations of water on public lands that had been made under local customs and procedures.¹⁰⁸ The Desert Land Act further stated:

All surplus water over and above such actual appropriation and use, together with the water of all lakes, rivers and other sources of water supply upon the public lands and not navigable, shall remain and be held free for the appropriation and use of the public for irrigation, mining and manufacturing purposes subject to existing rights.¹⁰⁹

The Supreme Court held that the effect of the Desert Land Act was to sever the land and water estates in the public domain.¹¹⁰ Congress directed that water rights be established under state and territorial laws.¹¹¹ Each state had broad regulatory authority over water rights on public lands and the exclusive right to choose its own system of water law, subject only to the federal government's right to reserve water for federal lands and to protect navigation.¹¹² The federal government has never attempted to enact a uniform national or regional water law or to establish a nationwide water administrative agency to carry out such a law.

With few exceptions, both Congress and the federal judiciary have since built upon this historical foundation and emphasized the deference of the federal government to state law in the appro-

^{107.} Act of March 3, 1877, ch. 107, 19 Stat. 377 (current version at 43 U.S.C. § 321 (1988)); California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 156 (1935).

^{108.} California Oregon, 295 U.S. at 156.

^{109. 43} U.S.C. § 321 (1988).

^{110.} California Oregon, 295 U.S. at 162.

^{111.} Id. See also Ickes v. Fox, 300 U.S. 82, 94-96 (1937); Nevada v. United States, 463 U.S. 110, 123-24 (1983).

^{112.} California Oregon Power Co v. Beaver Portland Cement Co., 245 U.S. 152, 156 (1935); Kansas v. Colorado, 206 U.S. 46, 94 (1907); United States v. Rio Grande Dam and Irrigation Co., 174 U.S. 690, 702 (1899).

priation and use of water. The United States Supreme Court describes this deference, and the reasons for it, in different ways. In 1879, the Court said that appropriative water rights were "rights which the government had, by its conduct, recognized and encouraged and was bound to protect."¹¹³ Later, as noted above, the Court described the effect of congressional policy on western water and land as "severing" the two property estates, providing for state, not federal, control of water rights.¹¹⁴ Also, the Court noted that because the West is arid, water is vital to the economic well-being of the western states, which justifies laws "unlike any that ha[ve] been known in any part of the Western world."¹¹⁸ Further, the Court said that if federal law and state law reigned side by side in each river in the West, utmost confusion would prevail.¹¹⁶

Congress declared its deference to state water law by including in most major federal public land and environmental laws state water law "savings clauses" similar to those in section 8 of the Reclamation Act of 1902, which reads in part:

Nothing in this Act shall be construed as affecting or intended to affect or in any way interfere with the laws of any state or territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws \ldots .¹¹⁷

In California v. United States, the Court commented on the effect of this provision on the implementation of the Reclamation Act. It traced the history of federal and state relations in the field

116. California v. United States, 438 U.S. 645, 667-68 (1978).

117. 43 U.S.C. § 372 (1988). See also 33 U.S.C. §1251(g) (1988) (Clean Water Act); 16 U.S.C. § 821 (1988) (Federal Power Act).

^{113.} Broder v. Natoma Water & Mining Co., 101 U.S. 274, 276 (1879).

^{114.} California Oregon, 295 U.S. at 153-58. See also United States v. New Mexico, 438 U.S. 696, 702 (1978).

^{115.} United States v. Gerlach Live Stock Co., 339 U.S. 725, 746 (1950). The Supreme Court further commented on the difference aridity might make in Sporhase v. Nebraska, 458 U.S. 941 (1982). There the Court held that ground water is an article in commerce and that its interstate regulation is subject to commerce clause regulation. In so holding the Court struck down a Nebraska statute banning out-of-state export of water. The Court, however, said that: "A demonstrably arid State conceivably might be able to marshall evidence to establish a close means-end relationship between even a total ban on the exportation of water and a purpose to conserve and preserve water." *Id.* at 958.

of water and concluded with a comment that appears in many court decisions today. The Court said:

The history of the relationship between the Federal Government and the States in the reclamation of the arid lands of the Western States is both long and involved, but through it runs the consistent thread of purposeful and continued deference to state water law by Congress.¹¹⁸

Notwithstanding state law savings clauses and the expressed deference by Congress to state water law, the implementation of a number of federal statutes has conflicted with western water resource management. These federal statutes reflect legitimate and important interests in the management of water resources. These fundamental interests have their roots in federal land ownership in the West and in the United States Constitution.

B. Federal Interests in Water Resource Management

1. Navigation

One principal federal interest is derived from the clause that gives Congress power "to regulate commerce . . . among the several states."¹¹⁹ In two early cases the Supreme Court held that the power to regulate commerce included the power to regulate navigation.¹²⁰ Other cases expanded congressional authority to control navigable waters, and broadly defined the term "navigable."¹²¹

Eventually, the Supreme Court determined that it was no longer necessary that a water course be currently navigable.¹²² As a result, broader definitions were adopted. One example is the present test for navigability for purposes of the jurisdiction of the Federal Energy Regulatory Commission. The test is whether a water course "(1) . . . *presently* is being used or is suitable for [navigational] use, or (2) . . . has been used or was suitable for

122. Appalachian Electric, 311 U.S. 377.

^{118.} California v. United States, 438 U.S. at 653.

^{119.} U.S. CONST. art. I, § 8.

^{120.} Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 189-93 (1824); Gilman v. City of Philadelphia, 70 U.S. (3 Wall.) 713, 724-5 (1865).

^{121.} See United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53, 62-63 (1913); United States v. Chicago, M., St.P. & P.R.R., 312 U.S. 592, 596 (1941); United States v. Appalachian Elec. Power Co., 311 U.S. 377 (1940); Ashwander v. TVA, 297 U.S. 288, 328 (1936); see also Laurent, Judicial Criteria of Navigability in Federal Cases, 1953 Wis. L. REV. 9.

[navigational] use in the *past*, or $(3) \ldots$ could be made suitable for [navigational] use in the *future* by reasonable improvements."¹²³

Historically, the federal interest in water resource management under the commerce clause centered on navigation. The federal government dredged channels and harbors, built locks and other navigation-enhancing facilities, and prohibited impedance of navigation by those, for example, who wished to build a bridge across a navigable river or drain a navigable lake. Also, in the late 19th century the United States protected navigation by requiring federal authorization for actions that might affect navigable waters and by insisting that certain conditions be met as a prerequisite to such authorization.¹²⁴

More recently, the commerce clause has been used as a basis to safeguard the environment, regardless of navigation.¹²⁵ For example, under section 404 of the Clean Water Act (CWA), dredge or fill activities that may affect navigable waters of the United States must be authorized by the U.S. Army Corps of Engineers.¹²⁶ The CWA defines the term "navigable waters" to include all waters subject to the reach of the commerce clause. This means, essentially, that all waters of the United States are covered by the CWA. Environmental criteria used to evaluate section 404 permit applications often have little, if anything, to do with navigation.¹²⁷

127. Clean Water Act § 404 reads, "the Secretary of the Army acting through the Chief of Engineers may issue permits . . . for the discharge of dredged or fill material into the navigable waters at specified disposal sites." 33 U.S.C. § 1344. The conference report which accompanied the bill containing this language explained that Congress intended to assert federal jurisdiction over those waters subject to regulation under the commerce clause, U.S. CONST. art. 1, § 8, stating, "the conferees fully intend that the term 'navigable waters' be given the broadest constitutional interpretation unencumbered by agency determinations." S. REP. No. 1236, 92d Cong., 2d Sess. 144 (1972). In Natural Resources Defense Council v. Callaway, 392 F. Supp. 685 (D.D.C. 1975), the court ordered the Corps to expand the coverage of the § 404 program to include all waters that the federal government could constitutionally regulate under the commerce clause.

^{123.} Rochester Gas & Elec. Corp. v. FPC, 344 F.2d 594, 596 (2d Cir.), cert. denied, 382 U.S. 832 (1965) (emphasis in original).

^{124.} See Rivers and Harbors Act of 1899, 33 U.S.C. §§ 401-467n. (1988).

^{125.} See D. TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 9.03 (1988).

^{126. 33} U.S.C. § 1344 (1988). States may obtain delegated authority for this program upon meeting certain criteria, but only one state has done so. See infra note 208.

2. Proprietary Interests

Another federal interest in western water management stems from federal land ownership in the West. The Supreme Court has implied to Congress an intent to reserve water rights when it sets aside lands from the public domain to be used for specific purposes.¹²⁶ The Constitution authorizes such reserved rights which are necessary to carry out the purposes of the reservation.¹²⁹ They constitute an exception to the rule that the land and water estates in the West were severed and that rights to use water must be obtained under state law.¹³⁰

The federal interest in securing reserved rights for federal lands ranges from assuring drinking water for military installations to providing water to fulfill the purposes of national forests, monuments, and parks. Courts have also implied a congressional intent to provide water for use on Indian reservations. This is often described as being accomplished under the treaty power¹³¹

When the Federal Water Pollution Control Act was reauthorized (and thereafter became known as the Clean Water Act) the broad jurisdictional approach to dredge and fill regulation was retained. 33 U.S.C. § 1344. In United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985), the Court upheld an interpretation of the Corps' § 404 jurisdiction to include wetlands saturated by ground water rather than surface water. Subsequently, in Bailey v. United States, 647 F. Supp. 44 (D. Idaho 1986), a federal district court held that soils sufficiently saturated by groundwater may meet the Corps' wetland definition without the appearance of surface water. See also Quivira Mining Co. v. United States Environmental Protection Agency, 765 F.2d 126 (10th Cir. 1985).

For discussion of the implementation of § 404 after reauthorization of the Clean Water Act, see Mosher, When Is a Prairie Pothole a Wetland? When the Federal Regulators Get Busy, Nat'l J., Mar. 6, 1982, at 410; and Ray, Section 404 of the Clean Water Act: An EPA Perspective, 2 NAT. RESOURCES & ENV'T 20 (1987).

128. See infra notes 233-54 and accompanying text (§ III(C)(6)).

129. Some commentators construed the holding in Winters v. United States, 207 U.S. 564 (1908) to rely on either the property clause or the treaty clause of the Constitution. See TARLOCK, supra note 125, § 9.07[1][b]. Frank Trelease, however, argued that the federal functions exercised in the name of the reservation doctrine rest on the supremacy clause, coupled with the power exercised in making the reservation of land, or with some other power incidentally exercised on the reserved land. F. TRELEASE, FEDERAL-STATE RELATIONS IN WATER LAW 147-60 (1971).

130. California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935). See supra notes 103-18 and accompanying text (§ III(A)).

131. U.S. Const. art. I, § 8.

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and the "Indian commerce clause"¹³² of the Constitution, in conjunction with the property clause.¹³³

3. Environmental Concerns

In recent years, federal interests in western water management have increasingly revolved around environmental protection, aesthetics, and recreational uses. Thus, federal powers have been used to secure instream flows to protect and enhance fish and wildlife resources, to protect aesthetic values such as wild and scenic rivers, and to preserve endangered species.

This federal phenomenon occurs concurrently with the states' efforts to protect these same values through management of western water resources. These state efforts, some of which are described above,¹³⁴ have helped provide more water for recreational uses and environmental protection. More importantly, for purposes of this Article, these efforts have created a favorable environment for the protection of federal interests.¹³⁵ Nevertheless, many conflicts have developed as a result of federal actions to protect federal interests. These conflicts will be described in the next section.

C. Conflicts

There are many examples of conflicts between federal laws and western water law. As used here the term "conflict" is broadly construed and refers to instances where the implementation of federal laws adversely affects the operation of state water

132. Id.

^{133.} Other federal interests in water resource management arise under the war power and the general welfare power. *Id. But see* F. TRELEASE, *supra* note 129, at 147-60.

^{134.} See supra notes 11-91 and accompanying text (§§ II(B)(1)-(4)).

^{135.} A good example involves the issue of water rights for federal wilderness areas. Notwithstanding the contention of many observers that federally reserved rights must be recognized for such wilderness areas to adequately protect their water supply, the Solicitor of the Department of the Interior concluded that "Congress intended not to reserve water for those areas," and that "such water may be acquired by purchase or by appropriation for wilderness or related purposes. (e.g., instream flows for fish and wildlife purposes) under applicable state law." Federal Reserved Water Rights in Wilderness Areas, 96 Interior Dec. 211, 239 (Supp. III 1988).

law. It includes situations in which such federal action negatively affects the exercise of a state-issued water right, or where such actions are carried out in disregard of state laws that would otherwise apply.

1. The Federal Power Act and Electric Consumers Protection Act

When Congress passed the Federal Power Act (FPA) in 1920,¹³⁶ it inserted "savings clauses" to assure that states would retain the authority to manage and regulate water, notwithstanding that a federal agency would regulate the generation of electricity.¹³⁷ During the 1920s and 1930s, the Federal Power Commission (FPC) interpreted this language literally and therefore required hydropower permit applicants to demonstrate full compliance with state water law as a prerequisite to obtaining a hydropower license.¹³⁸

This practice stopped after the Supreme Court narrowly construed the savings clauses of the FPA, sections 9(b) and 27. In *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*,¹³⁹ the Court held that the FPC could license a hydropower project even though the licensee was in violation of Iowa law which prohibited the dewatering of a river and required the licensee to obtain a state permit to build a dam. The Court found

136. Act of June 10, 1920, ch. 285, 41 Stat. 1063 (codified as amended at 16 U.S.C. \S 791-823 (1988)).

The applicant must show that he has obtained, pursuant to the laws of the State, the right to appropriate, divert, and use the water for power purposes. If the applicant has obtained, in compliance with the laws of the State, a permit for the proposed diversion, from the State engineer or other agency of the State having jurisdiction in the matter, such a permit, in my opinion, satisfies the requirement of the statute.

2 FPC ANN. REP. 225 (1922). See also 3 FPC ANN. REP. 8 (1923). Several administrative orders issued by the FPC in the 1930s held that state water rights laws applied to hydropower projects licensed by the FPC. See 1 F.P.C., Opinions and Decisions, 360-61 (1937).

139. 328 U.S. 152 (1946).

^{137. 16} U.S.C. § 821 (1988).

^{138.} The FPC's initial annual report issued after passage of the Federal Power Act noted: "[i]n several of the States, particularly in California, action upon applications is awaiting the approval of water rights as required by section 9(b) of the act." 1 FPC ANN. REP. 27 (1921). The next year, the FPC's legal counsel opined concerning section 9(b) as follows:

that section 9(b) required only evidence satisfactory to the FPC of steps taken to acquire state approval, rather than actual compliance.¹⁴⁰ Otherwise, the Court determined, states could undermine the effectiveness of the FPA.¹⁴¹

After First Iowa, federal agencies came to view the savings language in federal laws generally as having a more limited application. However, in 1978 the Supreme Court ruled in *California* v. United States¹⁴² that the savings language in section 8 of the Reclamation Act¹⁴³ meant what it said; namely, that the Bureau of Reclamation must comply with state water law in the operation of the New Melones dam, absent clear Congressional directives to the contrary.

Section 27 of the FPA resembles the language of section 8 of the Reclamation Act. The case of California v. Federal Energy Regulatory Commission,¹⁴⁴ the so-called Rock Creek case, gave the Ninth Circuit Court of Appeals the opportunity to revisit the First Iowa holding in light of California v. United States. The question was whether an applicant before the Federal Energy Regulatory Commission (FERC), the successor to the FPC, needed to comply with minimum streamflow requirements imposed as conditions in a state water right permit. The state requirements were imposed to protect the downstream fishery. The Ninth Circuit summarily dismissed similarities between section 27 and section 8, and discounted any conflict between the Supreme Court's California v. United States and First Iowa decisions as addressing two different water-use programs distinct in both purpose and history. The Court found that "California's interpretation of the 1902 Reclamation Act does not affect First Iowa's interpretation of the FPA."145

The State of California, with the support of forty-three other states, successfully urged the Supreme Court to review the Ninth Circuit's decision. Nevertheless, the Court unanimously affirmed the lower court's decision, holding that "the California requirements for minimum in-stream flows cannot be given effect and

^{140.} Id. at 167.

^{141.} Id. at 164.

^{142. 438} U.S. 645 (1978).

^{143.} See supra text accompanying note 116.

^{144. 877} F.2d 743 (9th Cir. 1989), aff'd 110 S.Ct. 2024 (1990).

^{145.} California v. Federal Energy Regulatory Comm'n, 877 F.2d at 749.

allowed to supplement the federal flow requirements."¹⁴⁶ The Court said:

Were this a case of first impression, petitioner's argument based on the statute's language could be said to present a close question....

But the meaning of § 27 and the preemptive effect of the FPA are not matters of first impression. Forty-four years ago, this Court in *First Iowa* construed the section and provided the understanding of the FPA that has since guided the allocation of state and federal regulatory authority over hydroelectric projects...

We decline at this late date to revisit and disturb the understanding of § 27 set forth in *First Iowa*.¹⁴⁷

Proposed legislation has been introduced to overturn the effects of this decision by amending federal law.¹⁴⁸

The eventual resolution of this issue will have significant practical implications. In the late 1970s and early 1980s, Congress passed statutes that caused a significant increase in hydropower permit applications to FERC.¹⁴⁹ The applications jumped from approximately twenty per year in the mid-1970s to nearly 1900 in 1981.¹⁵⁰ This increase magnified controversies caused by FERC's unwillingness to defer water use decisions involving hydro projects to state water agencies, even though these agencies manage and allocate water rights, conduct water planning, certify compliance with state and federal water quality laws, and verify the structural safety of dams.

The problems experienced by western state water resource managers because of FERC's position that it holds exclusive au-

148. See 136 Cong. Rec. S9175-76 (daily ed. June 28, 1990).

149. Arnold, Emerging Possibilities for State Control of Hydroelectric Development, 13 ENVTL. L. REP. (Envtl. L. Inst.) 10,135, n.1 (1983).

150. Id.

. . .

^{146.} California v. Federal Energy Regulatory Comm'n, 110 S.Ct. 2024, 2033 (1990).

^{147.} Id. at 2028-29. The Court gave additional emphasis to this approach by stating: "[I]t is more important that the applicable rule of law be settled than it be settled right.... This is commonly true even where the error is a matter of serious concern, provided correction can be had by legislation." Id. at 2030 (quoting Burnett v. Coronado Oil & Gas Co., 285 U.S. 393, 406 (1932) (Brandeis, J., dissenting)). The Court also added that "Congress remains free to alter what we have done." Id. at 2029.

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thority to regulate water use associated with a hydro project are summarized in the following sections. These conflicts fall within a few general categories.

a. Imposition of Instream Flows

In some cases, FERC imposed instream flows without consultation with or consideration of state laws and authorities.¹⁵¹ For example, FERC awarded a hydropower exemption for development of the Vermillion Creek Hydropower Diversion Project in western Montana.¹⁵² The project would divert water through a penstock for several miles to a lower point of return on the creek. The exemption awarded by FERC stipulated that the project could be constructed and operated only if the applicant maintained a flow of seventy-five cubic feet per second (cfs) below the point of diversion. FERC imposed this stipulation without consideration of Montana's water management responsibilities set forth under state law.¹⁵³

Under Montana law, the reservation process provides the only legal means to establish an instream flow right, and this right can be obtained only by a government entity.¹⁵⁴ Without an instream reservation, Montana maintained that it must continue to allocate water for consumptive use in the reach stipulated by FERC for maintenance of instream flows.¹⁵⁵ Clearly, the question remains: who is responsible for assuring maintenance of the seventy-five cfs flow required by FERC? Since there has been no

154. See supra text accompanying note 37.

155. Id.

^{151.} An order issued by FERC for the proposed Rock Creek project in California made FERC's position clear:

The imposition of minimum flow releases for fishery protection and other purposes is an integral part of the Commission's comprehensive planning and licensing powers 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.

Rock Creek Limited Partnership, 38 F.E.R.C. ¶ 61,240 (March 11, 1987) (footnote omitted).

^{152.} WESTERN STATES WATER COUNCIL, 1983 ANNUAL REPORT 9 (1984).

^{153.} Id. at 10.

compliance with state law, the state cannot enforce the minimum flow. It is questionable whether FERC, as a practical matter, can enforce the requirement.

Similar problems have developed in Texas in connection with the renewal of the license for the Possum Kingdom Dam on the Brazos River and the licensing of the Guadalupe-Blanco River Authority's Canyon Dam Project number 3856.¹⁵⁶

In other cases, such as in the Rock Creek case,¹⁵⁷ state agencies have required hydro applicants to establish instream flows under state law different than those required by FERC. In the Rock Creek case, these required flows were greater than those imposed by FERC. FERC advised its applicants, however, that they need not comply with state law.

These problems have occurred despite FERC's lack of comprehensive authority to enforce or protect instream flow rights

156. These were not cases in which *all* state laws and authorities were ignored. Rather, in denying the Texas Water Commission's motion to intervene in the Morris Sheppard Dam case, which pointed to the conflict and apparent violation of state law arising from the proposal to use state water for a nondesignated beneficial use under the permit, FERC stated that under federal law it met all requirements for state coordination cited in § 10 of the Federal Power Act through negotiations with the Texas Parks and Wildlife Department. What FERC failed to consider is the expanded role of the Texas Water Commission in assessing the impacts of surface water resource projects on instream uses and fish and wildlife habitat delegated to it by the Texas Water Code. It is the opinion of the Texas Water Commission that the State, and particularly the agency with jurisdiction over its water resources, should not be eliminated from the decision-making process on hydroelectric projects, nor should such projects under FERC's jurisdiction be severed from the water issues which the state has jurisdiction to consider.

Again, with respect to Canyon Lake Dam, FERC consulted only with the Texas Parks and Wildlife Department on the amount needed to be released to protect fish and wildlife habitat. It was repeatedly made known to FERC during the licensing proceedings that the Governor of Texas, the Texas Water Commission, the Texas Water Development Board, and the Guadalupe-Blanco River Authority agreed that the Texas Water Commission is the state agency that must be consulted under § 10(j) of the Federal Power Act. Under TEXAS WATER CODE §11.152 (Vernon 1988), the Texas Water Commission is the agency responsible for assessing the effects, if any, of the issuance of water use permits on fish and wildlife habitats, after due consideration of comments submitted by the Texas Parks and Wildlife Department. Letter from Allen Beinke, Executive Director, Texas Water Comm'n, to Craig Bell (Nov. 27, 1989) [hereinafter Beinke Letter] (on file at the Western States Water Council office).

157. California v. Federal Energy Regulatory Comm'n, 877 F.2d 743 (9th Cir. 1989).

and its lack of capability to weigh and balance the local interests that underlie decisions to establish rights to protect instream flows. On the other hand, in every state where such instream flow conflicts have arisen, appropriate methods exist under state law to establish instream flow rights.¹⁵⁸

b. Order of Application

In some instances, FERC granted preliminary permit applications to develop hydropower sites to entities that do not hold and cannot obtain related state water rights. This is particularly troublesome where the holder of a state granted water right also seeks to develop the hydropower potential of a site.

For example, American Falls Reservoir District No. 2 and the Bigwood Canal Company own and operate the Milner-Gooding Canal in Lincoln County, Idaho. Located on the canal is the Dietrich drop-site. American Falls and Bigwood intended to develop a hydro project at the site and obtained a hydropower water right from the state of Idaho with a priority date of September 15, 1980.¹⁵⁹ However, on May 25, 1982, FERC granted a preliminary permit to develop the site to Idaho Renewable Resources, Inc. and the City of Ashton, Idaho.¹⁶⁰ In its license order FERC concluded that there were no significant, substantiated differences in the plans for development presented by the parties. However, concerning man-made irrigation facilities, Idaho law provides that water cannot be appropriated for hydropower development without the permission of the owner of the facilities.¹⁶¹ The FERC permittee had no such permission.

The FERC order issuing the preliminary permit to Idaho Renewable Resources and the City of Ashton resulted in one party having FERC approval to develop the site, even though a competitor was the only entity which could obtain the necessary water right under state law. Since there was almost no difference in the development plans of the parties, it was difficult for the State of Idaho to understand the reasoning that led to granting the right to develop hydropower potential to an entity which could not ob-

^{158.} See supra notes 33-68 and accompanying text (§ II(B)(2)).

^{159.} WESTERN STATES WATER COUNCIL, supra note 152, at 9.

^{160.} Id.

^{161.} Id.

tain a state water right. If FERC required demonstration of compliance with state water law as a prerequisite to granting a hydropower permit application, such controversies would not arise.¹⁶²

c. Subordination to Upstream Rights

In some instances, FERC refused to subordinate hydropower water rights to upstream diversionary rights which were necessary for other types of development. This occurred even though all parties other than FERC and its licensees, including appropriate state water resource agencies, have viewed the hydropower rights as subordinate.

For example, on July 30, 1986, FERC issued an order granting the Boise Cascade Corporation a license for the 9.5 megawatt Horseshoe Bend hydroelectric project. However, FERC refused to include language in the permit subordinating its water use to future upstream diversions, as requested by the Idaho Department of Water Resources.¹⁸³ FERC concluded in a footnote that such a condition would vest ultimate control over operation and continued viability of the project in the Department, rather than the Commission. The footnote referred to the *First Iowa* decision.¹⁸⁴

The Department responded by pointing out that the Commission's decision presumed to vest in FERC ultimate control over future diversions upstream of any FERC licensed project rather than in the states. The Department argued that this decision was inconsistent with congressional intent as manifested in the FPA. Nevertheless, FERC subsequently denied the Department's request for rehearing. Contrary to the Department's assertions, FERC concluded that the Department, not the Commission, carried the burden of substantiating its allegations that a license should be conditioned so as to allow future upstream diversions.¹⁶⁵

^{162.} This particular controversy was eventually settled by agreement among the parties, but no change in FERC policy resulted. Letter from Keith Higginson, Director of the Idaho Dep't of Water Resources, to Craig Bell (Nov. 22, 1989) (on file at the Western States Water Council office).

^{163.} Boise Cascade Corp. Project No. 5376-001, 36 F.E.R.C. ¶ 61,135 (July 30, 1986).

^{164.} Id. at 61,332 n.21.

^{165.} Horseshoe Bend Hydroelec. Co., 42 F.E.R.C. ¶ 61,072 (Jan. 25, 1988).

FERC offered the following concession:

[W]e can require the licensee to reasonably reduce its use of water for generation to coincide with reductions in flows caused by future upstream diversions if we . . . conclude that it would be in the public interest to accommodate such upstream diversions. IDWR [the Department] can petition the Commission at any time to have us exercise our authority.¹⁸⁶

In response, Keith Higginson, Director of the Idaho Department of Water Resources observed: "FERC's control is being asserted over river basins that they have only seen on a map," the names of which they "cannot spell or even pronounce."¹⁰⁷ He pointed out that the decision gives a hydropower developer a veto over new diversions on an entire river system and precludes any upstream development unless it is approved by FERC and its licensee. This, he argued, allows FERC to make decisions concerning water development and management that are clearly within the prerogatives of state water agencies under state law, decisions that FERC has neither the authority nor the capability to make.¹⁶⁶

FERC maintains that it will give special consideration to comprehensive state water plans pursuant to a provision of the Electric Consumers Protection Act, which provides an opportunity for recognition of state interests; however, FERC takes the position that it will only consider such plans as part of the record it develops in reaching its licensing decisions.¹⁶⁹

2. The Endangered Species Act

The Endangered Species Act (ESA)¹⁷⁰ requires federal agencies, permittees, and licensees to protect endangered species. Its implementation can conflict with the exercise of state water rights.

The ESA requires that endangered species be designated and listed, and prohibits the "taking" of such endangered species. The

^{166.} Id. at 61,325-26.

^{167.} Press release by R. Keith Higginson, Director of the Idaho Dep't of Water Resources (Jan. 29, 1988).

^{168.} See id.

^{169.} See 52 Fed. Reg. 39,905 (1987).

^{170. 16} U.S.C. §§ 1531-1544 (1988).

ESA further requires the Secretary of Interior to insure that any action

authorized, funded, or carried out by any [federal] agency... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected states, to be critical.¹⁷¹

Conflicts with state water rights usually arise from actions to protect endangered species habitat. A related issue is the potential of such federal actions to affect water entitlements under congressionally approved interstate water compacts. A description of some of these conflicts in the western states follows.

a. Nevada

In Pyramid Lake Paiute Tribe v. Lujan,¹⁷² the Pyramid Lake Indian Tribe brought an action alleging that the federal government violated the ESA in its operation of Lake Tahoe Dam. The United States owns the dam, which an irrigation district operates for the United States. The dam releases water from Lake Tahoe into the Truckee River, which flows through parts of California and Nevada and terminates in Pyramid Lake. The United States uses the dam as a storage reservoir for downstream consumptive uses in Nevada, and particularly for irrigation uses in the Newlands Reclamation Project. The water rights of Nevada users, including users of the Newlands Project, were quantified in the Orr Ditch decree.¹⁷³

In its complaint, the Paiute tribe alleged that the ESA requires the United States to release sufficient water from Lake Tahoe Dam to protect endangered species in Pyramid Lake, specifically the cui-ui and Lahontan cut-throat trout.¹⁷⁴ The defendants argued that such releases would significantly reduce the

^{171.} Id. § 1536(a)(2).

^{172.} No. S-87-1281-LLK (E.D. Cal.) (Sept. 8, 1987).

^{173.} United States v. Adams, Equity Docket No. A3 (D. Nev. Sept. 8, 1944) (Orr Ditch). See Nevada v. United States, 463 U.S. 110, 113-18 (1983).

^{174.} Letter from Roderick E. Walston, California Deputy Attorney General, to Norman Johnson (Oct. 6, 1988) [hereinafter Walston Letter] (on file at the Western States Water Council office).

availability of water for existing consumptive uses in California and Nevada, authorized under state law. These releases would particularly affect the Nevada consumptive uses adjudicated in the Orr Ditch decree.¹⁷⁵ California and Nevada intervened in the action, as did a number of water users in Nevada.¹⁷⁶ The action is pending in the federal district court in Sacramento.¹⁷⁷ However, if recent settlement legislation passed by congress is implemented, this action will be dismissed.¹⁷⁸

In an earlier related case, the Ninth Circuit Court of Appeals held that the Secretary of the Interior has discretion under the ESA to devote the entire project yield of Stampede Dam and Reservoir, which impounds water from a Truckee River tributary in California, to the restoration of the endangered species in Pyramid Lake. Thus, the Secretary could devote the entire yield to endangered species, instead of making water available for agricultural use in the Truckee Meadows area of Nevada, even though the project was originally authorized for agricultural uses.¹⁷⁹ Water rights from the project were sanctioned under state law. Since the municipalities of Reno and Sparks, located in the Truckee Meadows, have been acquiring agricultural water rights from project users, the operation of the project for endangered species has adversely affected water availability for those cities.¹⁸⁰

Federal agencies also challenged state water rights related to the Stillwater Wildlife Management Area, located adjacent to the Newlands Reclamation Project. It is the largest wetland area in Nevada, consisting of some 200,000 acres of desert and marsh habitat for nesting and migratory water fowl. The Nevada State Engineer issued water permits for recreation and wildlife uses at the refuge. The federal government, however, through issuing its

178. S. 3084, 101st Cong., 2d Sess. (1990).

^{175.} Id.

^{176.} Id.

^{177.} Pyramid Lake Paiute Tribe v. Lujan, No. S-87-1281-LLK (E.D. Cal.) (Sept 8, 1987).

^{179.} Carson-Truckee Water Conservancy Dist. v. Clark, 741 F.2d 257 (9th Cir. 1984).

^{180.} Walston Letter, supra note 174. The municipalities in the Truckee Meadows area brought the action, alleging that the Secretary must make the project yield available for municipal uses in the Truckee Meadows area. The court rejected the claim noting, among other things, that the congressional act authorizing the dam and reservoir established agricultural use as a project purpose, not municipal use. Clark, 741 F.2d 257.

final operating criteria and procedures for the Newlands Reclamation Project,¹⁸¹ asserted that such use of water is a "waste" under Nevada law and the ESA.¹⁸² Hence, the federal operating criteria require substantially increased water use efficiency in the Newlands Project in addition to the curtailment of water deliveries to the Stillwater refuge and other related wildlife areas so that less water will be diverted from the Truckee River. This will make more water available for the enhancement of threatened and endangered species located at Pyramid Lake.¹⁸³ This matter is presently pending before the Federal District Court in Nevada,¹⁸⁴ but will be suspended until after December 31, 1997 if the congressional settlement legislation is implemented.¹⁸⁵

182. Letter from Peter G. Morros, Nevada State Eng'r, to Norman Johnson, (October 12, 1988) [hereinafter Morros Letter] (copy on file at the Western States Water Council office).

183. Id.

184. Pyramid Lake Paiute Tribe v. Lujan, No. R-85-197-BRT (D.Nev.) (Apr. 18, 1988). The Newlands Reclamation Project also encountered problems because of the Endangered Species Act. Located in western Nevada, the project uses water from both the Truckee and Carson rivers to irrigate more than 70,000 acres of land. In the early 1980s, the Ninth Circuit, over the objection of the federal government, affirmed that project users held the water rights within the project. United States v. Alpine Land and Reservoir Co., 697 F.2d 851 (9th Cir. 1983). The Truckee-Carson Irrigation District, on behalf of these project users, filed numerous applications to change the place of use of certain water rights under Nevada law. NEV. REV. STAT. §§ 533.345-.435 (1987). Under the Endangered Species Act, the Pyramid Lake Paiute Indian Tribe and the federal government have challenged virtually all of the proposed transfers, in part on the basis that approval of the applications will result in increased diversions from the Truckee River to the detriment of endangered and threatened species in Pyramid Lake. Morros Letter, supra note 182. However, the federal district court in Nevada affirmed the State Engineer's approval of change applications on the alternative ground that Nevada water law did not apply. On appeal, the Ninth Circuit held that Nevada law applied to transfers of water rights under the 1983 Alpine Land decree. United States v. Alpine Land & Reservoir Co., 878 F.2d 1217 (9th Cir. 1989). Further, the record supported the State Engineer's findings that the transfers of water rights would not prove detrimental to public interests nor threaten existing rights. Id.

185. S. 3084, 101st. Cong., 2d Sess. (1990). Full implementation is expected to take at least five years. Telephone conversation between Jeanie Jones, Supervising Engineer, California Dep't of Water Resources, and Norman Johnson (Nov. 13, 1990).

^{181.} BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, NEWLANDS PRO-JECT, NEVADA-CALIFORNIA OPERATING CRITERIA AND PROCEDURE, RECORD OF DECI-SION at 8-11 (April 15, 1988).

b. Colorado

The Riverside Irrigation District and the Public Service Company of Colorado proposed to build a dam and reservoir on Wildcat Creek, a tributary of the South Platte River, in Morgan County, Colorado, to store water for irrigation and for cooling a coal-fired power plant.¹⁸⁶ After obtaining a state water right for the dam's construction, the irrigation district sought a nationwide section 404 dredge and fill permit required under the CWA.

The Corps of Engineers denied the section 404 permit on the basis of the potentially harmful effects of sand and gravel discharge during construction of the dam.¹⁸⁷ Behind this decision, however, was the alleged environmental impact of the water diversion on whooping crane habitat, some 250 miles downstream.¹⁸⁸ A U.S. Fish and Wildlife Service biological opinion concluded that the "Wildcat Reservoir is likely to jeopardize continued existence of the whooping crane and adversely modify a 53-mile reach of the Platte River which is critical habitat for the crane."¹⁸⁹

The biological opinion identified the need for a peak flow runoff, which the dam intended to impound, for purposes of scouring the stream bed in the crane's critical habitat area to remove objects that might allow predators of the crane to disguise themselves while preying upon the crane. The proponents of the dam questioned whether such incidentally related effects could reasonably serve as the basis for the denial of a nationwide permit.

Before the Tenth Circuit, Colorado argued that only direct effects of depletion could be considered in evaluating whether to grant the section 404 permit. The Tenth Circuit, however, held that the Corps should consider all effects of depletion, both direct and indirect.¹⁹⁰ Colorado also argued that the Corps' decision was

190. Andrews, 758 F.2d at 511-12.

^{186.} Riverside Irrigation Dist. v. Andrews, 758 F.2d 508, 511 (10th Cir. 1985). 187. Id. at 511-12.

^{188.} Id.

^{189.} Riverside Irrigation Dist. v. Stipo, 658 F.2d 762, 764 (10th Cir. 1981), on remand Riverside Irrigation Dist. v. Andrews, 568 F.Supp. 583 (D. Colo. 1983), aff'd 758 F.2d 508 (10th Cir. 1985) (quoting biological opinion by D. Minnich, regional director, U.S. Fish and Wildlife Service, U.S. Dep't of the Interior).

precluded by section 101(g) of the CWA in which Congress adopted a policy of noninterference with state water laws and entitlements.¹⁹¹ The state further urged the court to disallow the Corps' decision because it precluded Colorado's use of its entitlement under the South Platte River Compact. The Tenth Circuit characterized the language of 101(g) as only a policy statement. Further, it said that "[e]ven if denial of a nationwide permit is considered an impairment of the state's authority to allocate water, a question that we do not decide, the Corps acted within its authority."¹⁹² The court then held that the Corps acted within its authority in denying the nationwide permit.¹⁹³

c. Wyoming

The Wyoming Water Development Commission proposes to construct Sandstone Reservoir on a tributary of the Little Snake River in the Colorado River Basin. The state signed an agreement supporting the Colorado River Endangered Species Recovery Implementation Plan.¹⁹⁴ Under the plan, the states agreed to pay an annual base sum, plus an additional sum per acre-foot of water depleted from the river system, as mitigation for proposed water projects on the Colorado River. In consultation proceedings under section 7 of the ESA,¹⁹⁵ the U.S. Fish and Wildlife Service (FWS) decided to require additional mitigation with respect to Sandstone Reservoir. In its view, "sufficient progress" had not been made on the recovery plan.¹⁹⁶ Therefore, the FWS asked Wyoming, as a project proponent, to contribute more than the amount contemplated under the original plan as an "insurance policy" for the recovery efforts.¹⁹⁷ Specifically, the FWS requested minimum

194. Letter from Jennifer Hager, Wyoming Assistant Attorney General, to Norman Johnson (Dec. 4, 1989) [hereinafter Hager Letter] (on file at the Western States Water Council office).

195. 16 U.S.C. § 1533 (1988).

196. Hager Letter, supra note 194

197. Id.

^{191.} Id. at 513.

^{192.} Id.

^{193.} Id. at 514. A nationwide permit is "one covering a category of activities occurring throughout the country that involve discharges of dredge or fill material that will cause only minimal adverse effects on the environment when performed separately and will have only minimal cumulative effects. See 33 U.S.C. 1344(e)(1)." Id. at 511. Riverside and the State of Colorado contended that the routine activity which Riverside sought to carry out fit within this definition.

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instream flows below the reservoir, with a guarantee of protection for those flows beyond the Wyoming-Colorado state line. No provisions exist under Wyoming law to guarantee such an instream flow.¹⁹⁸

Another conflict occurred in Wyoming concerning the Gravrocks Reservoir on the Laramie River. There, after a section 404 CWA¹⁹⁹ permit was issued for the construction of the dam. the permit was challenged for noncompliance with both the ESA and the National Environmental Policy Act.²⁰⁰ After construction began, the State of Nebraska and several environmental groups obtained an injunction in federal district court to halt construction.²⁰¹ While the case was pending in the Eighth Circuit Court of Appeals, a settlement was reached whereby, among other things, the project proponent agreed to make certain releases from the reservoir, ostensibly to protect endangered species in central Nebraska. The agreement requires the project to provide for a specified flow at the mouth of the Laramie River on the North Platte River. Wyoming is not a party to the agreement, and no entity has obtained an instream flow right under Wyoming law for the Laramie River. Consequently, according to Wyoming law, any releases made from the reservoir become flows available for appropriation.202

d. Other Examples

Other conflicts have arisen in western states as a result of the implementation of the ESA. These conflicts concern the construction of water development projects.²⁰³ In each case, water rights had either been granted, or were available to the project sponsors under state law. These conflicts include the Cheyenne Water Development Project and the Windy Gap Project in Wyoming, the Moon Lake Power Plant, the White River Dam and Reservoir,

^{198.} Id.

^{199. 33} U.S.C. § 1344 (1988).

^{200. 42} U.S.C. §§ 4321-4370 (1988).

^{201.} Hager Letter, supra note 194.

^{202.} Id.

^{203.} Endangered Species Act Authorizations: Hearings before the Subcomm. on Environmental Pollution of the Comm. on Environment and Public Works, 99th Cong. 1st Sess. 70-78 (1985) [hereinafter ESA Hearings] (statement by the Western States Water Council).

and the Quail Creek Reservoir in Utah.²⁰⁴ More recently, endangered species designations have conflicted with construction of the congressionally authorized Milican Reservoir and the Colorado River Municipal Water District's Stacy Reservoir Project in Texas.²⁰⁵

According to a report of the Western States Water Council. over half of the sixty species of fish listed by FWS as endangered or threatened in 1985 had a historic range covering one or more of the Western states, including Arizona, California, Colorado, Nevada, New Mexico, Oregon, Texas, Utah, and Wyoming. The Council also found that in 1985 three additional fish species were listed as endangered or threatened and another dozen were proposed for listing. The proposed listings each reflected the belief that the species faced existing or potential adverse impacts due to destruction or modification of habitat by water-related activities such as construction of dams, impoundments, or other instream barriers, water diversions and depletions, channelization, siltation, the lining and dredging of irrigation canals, ground water pumping, livestock watering, and water pollution. The Council concluded that, as the list of endangered species lengthens, conflicts with western water-related water resource management would increase.206

3. Clean Water Act Section 404

Section 404 of the CWA²⁰⁷ also sparked conflict with the ex-

207. 33 U.S.C. § 1344 (1988). Clean Water Act § 208, 33 U.S.C. § 1329(b)(1) (control of non-point source pollution through area-wide management plans), and § 402, 33 U.S.C. § 1342(a)(1) (control of point source pollution through insurance of National Pollutant Discharge Elimination System Permits), also have the potential to conflict with western water law. MacDonnell, Federal Interests in Western Water Resources: Conflict and Accommodation, 29 NAT. RESOURCES J. 389,

^{204.} Id.

^{205.} Letter from Jackson Kramer, Texas Water Comm'n, to Craig Bell (Sep. 22, 1988) [hereinafter Kramer Letter] (on file at the Western States Water Council office).

^{206.} ESA Hearings, supra note 203, at 70-78 (statement by the Western States Water Council). Currently, several petitions are pending with the National Marine Fishery Service to list certain Columbia River salmon species as endangered. If any of these petitions are granted, or if any of the species is listed as threatened, existing uses of the river will likely be significantly affected. Rourke, Endangered Species Act May Affect Columbia River Water Users, 23 WATER L. NEWSLETTER, Nov. 2, 1990, at 7.

ercise of western states water rights. Section 404 requires a permit from the U.S. Army Corps of Engineers for the discharge of dredge and fill material into the waters of the United States.²⁰⁸ The broad jurisdiction of the law includes not only waters navigable in fact, but other water bodies, adjacent wetlands, and other wet areas as well.²⁰⁹ Section 404 can affect the exercise of state water rights because a federal permit is often required for construction of water diversion or impoundment structures. Denial of such a permit, or issuance of a permit with specific conditions, may preclude or limit the exercise of state water rights. Also, special conditions in section 404 permits may conflict with conditions included in water use permits issued under state law.

Although the number of conflicts decreased from the late 1970s and early 1980s,²¹⁰ recent expansion in the wetlands protection efforts of the Environmental Protection Agency (EPA) and the FWS threatens to result in further conflicts. As a result of this increased emphasis on protecting wetlands, water development projects based on state authorization may become more difficult to construct. Furthermore, an increased number of special

209. See supra note 127.

^{400-03 (1989).}

^{208.} States may assume authority to issue individual and general § 404 permits. 33 U.S.C. § 1344(g)(1). Only one state, Michigan, assumes this authority. The original EPA regulations outlining requirements for delegation of the § 404 program were criticized as unnecessarily demanding, too complex, and too paperwork-intensive. Williams, *EPA Revises Wetlands Regulations*, 10 Nat'L WETLANDS NEWSL 12 (1988), *cited in* W. WANT, LAW OF WETLANDS REGULATION 3-5 (1989). EPA published new regulations governing state assumption of the § 404 program in 1988. 53 Fed. Reg. 20,779-80 (1988) (codified at 40 C.F.R. § 233.21(d) (1988)).

^{210.} See WESTERN STATES WATER COUNCIL, SECTION 404 OF THE CLEAN WATER ACT (1981). However, conflicts could increase again in connection with development and implementation of a national "no net loss of wetlands" goal. A recent memorandum of agreement (MOA) between the Corps of Engineers and the EPA relating to this goal brought a severe protest from several western governors. They argued, among other things, that the MOA had been developed without ample input from state officials. Letter from Steve Cowper, Governor of Alaska, to President George Bush (Dec. 7, 1989); Letter from George A. Sinner, Governor of North Dakota, to John H. Sununu, Executive Office Chief of Staff (Feb. 9, 1990); Letter from Norman H. Bangerter, Governor of Utah, to John H. Sununu, Executive Office Chief of Staff (Feb. 7, 1990); Letter from Mike Sullivan, Governor of Wyoming, to John H. Sununu, Executive Office Chief of Staff (Feb. 6, 1990); Letter from Stan Stephens, Governor of Montana, to President George Bush (Mar. 6, 1990) (copies on file at the Western States Water Council office).

conditions are expected to be included in section 404 permits.²¹¹ These conditions will relate to maintenance of minimum continuous flows and purchase of lands for mitigation. Such conditions may be contrary to state laws and decisions.

Although conflicts with respect to section 404 may arise independently of the implementation of another federal statute, this is usually not the case. For example, as described above, the Corps of Engineers, in consultation with other federal agencies, sometimes denies a permit because there will be an adverse impact on endangered species habitat from the construction of facilities utilizing state-granted water rights.²¹² Thus, in many instances a section 404 permit is the vehicle for asserting the federal government's interest in protecting endangered species.

Texas issued a water permit for development of the Choke Canyon reservoir project. The permit included a special condition requiring the permittee to provide not less than 151,000 acre-feet of water annually for estuarine maintenance.²¹³ However, a section "404 permit special condition stated that releases for the estuaries '... be in consonance with U.S. Fish and Wildlife Service recommendations.' "²¹⁴ This, in the view of the state, placed some management and operation responsibilities for the reservoir in the hands of a federal agency rather than the state and its licensed developer. A second section 404 permit condition would require construction of bypass channels if operation of the project causes reduction in the inundation frequency of a delta marsh. Conflict with downstream water right holders will occur if the bypass channels are constructed.²¹⁸

- 213. Kramer Letter, supra note 205.
- 214. Id.
- 215. Id.

^{211.} See, e.g., Kramer Letter, supra note 205; Letter from Rosellen Sand, North Dakota Assistant Attorney General, to Norman Johnson (Oct. 6, 1988); Letter from Dee Hansen, Executive Director of the Utah Dep't of Natural Resources, to Norman Johnson (Dec. 19, 1988) (copies on file at the Western States Water Council office).

^{212.} Riverside Irrigation District and the Public Service Company of Colorado's § 404 permit for Wildcat dam was denied on this basis. See supra notes 186-93 and accompanying text (§ III(C)(2)(b)).

4. Superfund Amendment Reauthorization Act

The Superfund Amendments Reauthorization Act of 1986²¹⁶ states in section 121(e) that "[n]o Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section."²¹⁷ Several Superfund sites are located in Arizona. Recently, concerning one of the sites, the Environmental Protection Agency took the position that section 121(e) made it unnecessary for the responsible parties to apply for state ground water permits.²¹⁸

The Arizona Department of Water Resources issues permits for activities such as well construction, poor quality ground water withdrawal, hydrologic testing, and other activities involved in a Superfund cleanup. These state permits give the applicant the right to drill wells or withdraw ground water. Through permit conditioning and enforcement of permit requirements, these permits allow the state to monitor permit related activities to assure that they comply with state law. They also give the state the opportunity to bring an enforcement action against the applicant when permit conditions are violated.²¹⁹

In response to EPA's position that no state permit was required, the state argued that EPA seems disposed to allow parties engaged in Superfund site cleanups to "do anything [they] want[] to at Superfund sites, including the extreme case of complete and total pumpage of all ground water within an aquifer."²²⁰ The state did not disagree with EPA's position with regard to action taken in an emergency. However, it objected when circumstances were such that obtaining a state permit would not in any way jeopardize actions taken under the Superfund program. The state believed that most ground water withdrawal permits would fall within this latter category. Nevertheless, EPA continued to take the position that no state permits were required under any cir-

^{216.} Pub. L. No. 99-499, 100 Stat. 1613 (codified in scattered sections of 42 U.S.C.).

^{217. 42} U.S.C. § 9621(e)(1) (1988).

^{218.} Letter from C. Laurence Linser, Acting Director of the Arizona Dep't of Water Resources, to Norman Johnson (Sept. 27, 1988) [hereinafter Linser Letter] (on file at the Western States Water Council office).

^{219.} Id.

^{220.} Id.

cumstances. Because of this situation, the only remedy available to the state appeared to be an action in federal district court against any violator of a substantive state law requirement.²²¹

The party conducting Superfund cleanup temporarily resolved the conflict by choosing to cooperate with the state government and applying for necessary state permits, despite EPA's advice to the contrary.²²² Further, although EPA still insists that "no permits are required," it recently agreed to allow language in a consent decree requiring parties to obtain applicable licenses (a broad definition encompassing Arizona's permits) and to strongly urge responsible parties to comply fully with state requirements.²²³

5. Migratory Bird Conservation Act

The Migratory Bird Conservation Act²²⁴ authorizes the Secretary of the Interior to acquire, develop, and maintain refuges for migratory birds. The Migratory Bird Hunting Stamp Act of 1934 provided basic funding for acquisition of refuge land.²²⁵ In addition, other federal wetland laws have generated funds to acquire and preserve migratory bird habitat.²²⁶ The purpose of these acts is to preserve and enhance the habitat of migratory water fowl. From time to time, the Department of the Interior pursues a nonmonetary form of land acquisition to preserve fish and wildlife habitat. Such acquisitions involve the acceptance of land donations into a perpetual nondevelopment easement program. These lands, in turn, are placed in the federal national wildlife refuge system.²²⁷

In December 1986, FWS, acting under its bottomland hardwoods acquisition program, accepted an easement donation of 3802 acres of privately owned land from the Little Sandy Hunting and Fishing Club located in Wood County, Texas. The purpose of the easement was to protect habitat for migratory water fowl and

- 224. 16 U.S.C. § 715 (1988).
- 225. 16 U.S.C § 718(b) (1988).
- 226. See, e.g., 16 U.S.C. § 3911 (1988).
- 227. Kramer Letter, supra note 205.

^{221.} Id.

^{222.} Id.

^{223.} Telephone conversation between Laurence Linser, Arizona Dep't of Water Resources, and Norman Johnson (Dec. 19, 1989).

other wildlife resources. The terms of the agreement required maintenance of the status quo and approval by FWS of any changes in land use and management by land owners. Further, any significant action, such as development of a reservoir project which would inundate part of the easement, would require the approval of Congress.²²⁸

According to the Texas Water Commission and the Sabine River Authority, an agency of the State of Texas, FWS accepted the easement donation from the Little Sandy Hunting and Fishing Club after minimal consultation with appropriate state agencies or the general public.²²⁹ The final environmental assessment concerning the donation concluded that no significant environmental impact would result and that no comprehensive environmental impact statement was required. FWS was aware that the Sabine River Authority proposed to develop the Waters Bluff Dam and Reservoir Project in conflict with the easement donation. Still, the federal agency concluded that no impact assessment was necessary because construction of the project could proceed if the sponsors could secure congressional approval.²³⁰ The effect was to preclude construction of the reservoir, in conflict with Texas water planning and management responsibilities. Texas determined that seventeen of the forty-five proposed major reservoirs identified in the Texas Water Plan as necessary to meet state water demands by the year 2030 could be affected by the FWS bottomland hardwoods acquisition program.²³¹

6. Reserved Rights Doctrine

Another area of conflict between federal law and western water resource management is the federal reserved water rights doctrine. Few western water law topics have engendered as much interest among commentators as the reserved rights doctrine.³³⁹

^{228.} Id.

^{229.} Id.

^{230.} Id.

^{231.} Beinke Letter, supra note 156.

^{232.} See, e.g., Bond, Indian Reserved Water Rights Doctrine Expanded, 23 NAT. RESOURCES J. 205 (1983); Brookshire, Merrill & Watts, Economics and the Determination of Indian Reserved Water Rights, 23 NAT. RESOURCES J. 749 (1983); Burness, Cummings, Gorman & Lansford, Practicably Irrigable Acreage and Economic Feasibility: The Role of Time, Ethics, and Discounting, 23 NAT. RESOURCES J. 289 (1983); Burness, Cummings, Gorman & Lansford, The New Ari-

Moreover, some fifty cases are pending where reserved rights claims are at issue. It is beyond the scope of this Article to discuss in detail the issues involved in those cases. However, given the importance of the reserved rights doctrine to an understanding of federal-state relations in water law, a brief overview is provided.

The doctrine is a judicial creation, based on federal proprietary interests and federal constitutional powers,²³³ and was first articulated in an Indian water rights case.²³⁴ It provides that when the United States sets aside a federal reservation from public land holdings at large, the amount of water necessary for the primary purposes of the reservation is impliedly reserved for use on the reservations.²³⁵ Reserved rights for older reservations have the potential, when quantified, to conflict with many water rights created under state law because their priority date precedes most other rights. Reserved rights for newer reservations, such as Bureau of Land Management wilderness areas, have the potential to tie up remaining available water supplies in some areas.²³⁶

zona v. California: Practicably Irrigable Acreage and Economic Feasibility, 22 NAT. RESOURCES J. 517 (1982); Corker, A Real Live Problem or Two for the Waning Energies of Frank J. Trelease, 54 DEN. L.J. 499 (1977); Hundley, The "Winters" Decision and Indian Water Rights: A Mystery Reexamined, 13 W. HIST. Q. 17 (1982); Getches, Water Rights on Indian Allotments, 26 S.D.L. Rev. 405 (1981); Leshy, Water and Wilderness/Law and Politics, 23 LAND & WATER L. REV. 389 (1988); Miller, Taming the Rapids: Negotiation of Federal Reserved Water Rights in Montana, 6 PUB. LAND L. REV. 167 (1985); Murril, Aboriginal Water Rights, 20 NAT. RESOURCES J. 45 (1980); Muys, Comments on "Federal Reserved Water Rights," 54 DEN. L.J. 493 (1977); Pelcyger, Indian Water Rights: Some Emerging Frontiers, 21 ROCKY MTN. MIN. L. INST. 743 (1980); Sommer, Ninth Circuit Rules that Disclaimer States Lack Jurisdiction Over Indian Water Rights Under the McCarran Amendment, 23 NAT. RESOURCES J. 255 (1983); Trelease, Federal Reserved Water Rights Since PLLRC, 54 DEN. L.J. 473 (1977); Comment, Reserved Rights: Water for Fish Protection and the 1983 Indian Water Rights Decisions, 63 OR. L. REV. 699 (1984); Comment, State Disclaimers of Jurisdiction Over Indians: A Bar to the McCarran Amendment?, 18 LAND & WATER L. REV. 175 (1983); Note, Federal Acquisition of Non-Reserved Water Rights After New Mexico, 31 STAN. L. REV. 885 (1979) [hereinafter Federal Acquisition of Non-Reserved Water Rights]; Note, Indian Reserved Water Rights: The Winters of Our Discontent, 88 YALE L.J. 1689 (1979) [hereinafter Note, Indian Reserved Water Rights].

233. See supra notes 128-33 and accompanying text (§ III(B)(2)).

234. Winters v. United States, 207 U.S. 564 (1908).

235. See United States v. New Mexico, 438 U.S. 696, 699-700 (1978); Cappaert v. United States, 426 U.S. 128, 135 (1976).

236. The recognition of reserved water rights for wilderness areas is contro-

The Supreme Court created the doctrine even though Congress repeatedly and explicitly deferred to state law in a series of statutes passed to encourage settlement and private development in the western territories and states. In the Mining Act, the Desert Land Act, the Reclamation Act, and other laws, Congress required acquisition of water rights under state and territorial custom and law. Thus, the United States government did not simply acquiesce in this regard, but instead directed that settlers and developers of public lands acquire water rights under state and territorial legal systems.²³⁷

At the same time the federal government was enticing private entities to settle western public lands, it was reserving certain parcels of these lands for its own specific purposes. However, the United States made no express reservations of water for these withdrawn lands. This left to the judiciary the task of determining by implication whether Congress intended to exercise the constitutional power necessary to create federal water rights for use on federal reservations.

The first case to decide this question was Winters v. United States.²³⁸ The Supreme Court decided Winters in 1908, years after the creation of many of the reservations. It held that Congress must have intended to reserve water for lands it set aside for the Assiniboin and Gros Ventre Indians, because otherwise the lands would be valueless.²³⁹ These water rights were determined to be prior in right to non-Indian appropriations acquired after creation of the reservation, even though the appropriations occurred prior to actual Indian uses.

237. See supra text accompanying notes 106-11.
238. 207 U.S. 564 (1908).
239. Id. at 576-77.

versial. In Sierra Club v. Block, 615 F. Supp. 44 (D. Colo. 1985), the court held that when U.S. Forest Service land is set aside as wilderness land, the agency must establish a reserved water right for wilderness purposes. One commentator described this anomaly as "a kind of double reserved right." Address by Rod Walston, Western States Water Council Water Policy Seminar (April 14, 1989). On Appeal, the Tenth Circuit held that the issue was not ripe for judicial resolution and dismissed and vacated the district court opinion. Sierra Club v. Yeutter, 911 F.2d 1405 (10th Cir. 1990). In a formal opinion, the Department of the Interior Solicitor concluded that reservation of wilderness land creates no reserved water right. Federal Reserved Water Rights in Wilderness Areas, 96 Interior Dec. 211, 239 (Supp. III 1988).