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USE PREFERENCES FOR WATER

ROBERT E. BECK*

I. INTRODUCTION

We are all familiar with preferences¹ for water use based on location under riparian rights doctrine² or priority based on time under prior appropriation doctrine.³ This article considers preferences for water based on uses that water would be put to, rather than preference or priority based on location or time.⁴ The article focuses on the extent to which use preferences exist today, the perceived purposes served by those preferences, and what, if any, such preferences should exist in the future.

Water law developed in the United States first in the context of allocating surface waters⁵ under the riparian rights and prior appropriation doctrines.⁶ Both doctrines recognized, and still do, that some uses are not permissible at all, or, if allowed, are to be severely limited. Thus, under riparian rights doctrine a use has to be reasonable to qualify as permissible,⁷ and under prior appropriation doctrine the use has to be beneficial/reasonable.⁸ These absolute preferences that any use in order to be protected must be either reasonable or beneficial/reasonable will only be discussed briefly⁹ since the principal focus of this article will be

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1. "'Preference' is a generic term, and a preferential right may have one of a number of different effects." Frank J. Trelease, *Preferences to the Use of Water*, 27 ROCKY MTN. L. REV. 133, 133 (1955).

2. See generally 1 WATERS AND WATER RIGHTS chs. 6-9 (Robert E. Beck ed., 1991 & Supp. 2000).

3. See generally 2 WATERS AND WATER RIGHTS chs. 11-17 (Robert E. Beck ed., 2000).

4. For earlier articles dealing with use preferences, see Jarret C. Oeltjen & Lloyd K. Fischer, *Allocation of Rights to Water: Preferences, Priorities, and The Role of the Market*, 57 NEB. L. REV. 245 (1978); Alan D. Gross, *Condemnation of Water Rights For Preferred Uses—A Replacement For Prior Appropriation?*, 3 WILLAMETTE L.J. 263 (1965); Trelease, *supra* note 1; and Robert L. Thomas, *Appropriations of Water for a Preferred Purpose*, 22 ROCKY MTN. L. REV. 422 (1950).

5. Legal regimes developed first for surface waters, but groundwater, which in many states is governed by a regime different from that governing surface waters, is covered by this article, and if something special about groundwater needs to be noted it will be noted.

6. Other doctrines developed to deal with the disposal of unwanted surface waters. There are now three approaches to such disposal: common enemy, natural flow, and reasonable use. See generally 2 WATERS AND WATER RIGHTS, *supra* note 3, § 10.03(b); 5 WATERS AND WATER RIGHTS §§ 59.01-59.04 (Robert E. Beck ed., 1998 & Supp. 2000).

7. However some states in the eastern United States flirted with a "natural flow" doctrine. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(c).

8. See generally 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.02(c)(2); Janet C. Neuman, *Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use*, 28 ENVTL. L. 919 (1998).

9. See discussion *infra* Part II.

on preferences among uses that fall within the reasonable or beneficial/ reasonable classifications.

While both riparian rights and prior appropriation doctrines have a common law history,¹⁰ today statutes in both riparian rights doctrine states and prior appropriation states contain preferences among water uses.¹¹ While prior appropriation common law did not develop any use preferences,¹² common law riparian doctrine did¹³ and because most prior appropriation states¹⁴ at one time followed riparian doctrine,¹⁵ they obviously became familiar with the common law riparian rights preferences.

Furthermore, from early on the federal government became involved with navigable waters¹⁶ and became the owner of vast tracts of land containing many water sources.¹⁷ Due to the Supremacy Clause of the Constitution,¹⁸ federal preferences for water use, if implemented within the exercise of Congress's enumerated powers,¹⁹ are the supreme law of the land. Thus both state and federally created use preferences will be considered.

After briefly discussing the absolute requirements of reasonable or beneficial/reasonable use, this article explores (1) use preferences and their nature created under (a) common law riparian and groundwater doctrine, (b) federal law, (c) public trust doctrine and state sovereignty, and (d) state statutes; (2) the functions these existing use preferences serve; and (3) concludes with a look at what the future may or ought to hold for use preferences.

10. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 11.02; 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.01.

11. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.02(c)(2); 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03(a)(3).

12. Courts applying prior appropriation doctrine, however, did find some uses not to be beneficial. See, e.g., *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972 (Cal. 1935) (flooding to exterminate rodents); *Blaine County Inv. Co. v. Mays*, 291 P. 1055 (Idaho 1930) (flooding to form ice for preserving soil moisture).

13. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(b).

14. There are 18 prior appropriation states. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 11.04(a). The exceptions to following riparian doctrine are the six Colorado doctrine states. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.01. But even among those six, Nevada followed riparian doctrine for a short time. See *Jones v. Adams*, 6 P. 442, 448 (Nev. 1885).

15. See 1 WATERS AND WATER RIGHTS, *supra* note 2, §§ 8.01-8.04.

16. See generally 4 WATERS AND WATER RIGHTS § 35.02 (Robert E. Beck ed., 1998 & Supp. 2000).

17. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 11.03(a).

18. See U.S. CONST. art. VI, cl. 2; see also 4 WATERS AND WATER RIGHTS, *supra* note 16, § 35.08.

19. See generally 4 WATERS AND WATER RIGHTS, *supra* note 16, §§ 37.01-37.06.

II. THE REASONABLE AND BENEFICIAL/REASONABLE USE REQUIREMENTS

Although the primary focus of this article is on preferences among uses of water that generally are recognized as permissible uses because they are reasonable or beneficial/reasonable, it is necessary to consider these limitations themselves because, particularly as to the western United States, some uses that currently enjoy a preferred status had a struggle to even be recognized as beneficial uses in the first instance. Status may change again.

Reasonable use under riparian doctrine is a balancing act. Basically each riparian has an equal right to make a reasonable use of the water,²⁰ but in doing so the user has "an obligation not to injure unreasonably another riparian user."²¹ Courts, as a general proposition, have not determined that a particular use of the water by a riparian would be unreasonable in the abstract and without more.²² Rather, a use becomes unreasonable when it interferes unreasonably with another riparian's use of the water.²³ In this context it is not profitable to talk about certain uses being reasonable or unreasonable. Any use is *prima facie* reasonable but might be unreasonable in a particular context.

It was clear by the time North Dakota enacted its Irrigation Code in 1905 that under prior appropriation doctrine: "Beneficial use shall be the basis, the measure, and the limit of the right to use of water . . ." ²⁴ Under prior appropriation doctrine water was usually diverted from its source²⁵ so that two questions developed in assessing beneficial use under that doctrine: Was the diverted water used at all?;²⁶ Was the water that was being used, being used beneficially?²⁷ No right was acquired until water was put to use and then only if the use was considered to be a beneficial use. In addition, theoretically, once water had been put to beneficial use and a water right obtained, the right could be lost, in whole or in part, for subsequent wasteful, that is, nonbeneficial, use of the water.

Under prior appropriation doctrine some uses were determined in the abstract to be nonbeneficial.²⁸ And legislatures from time to time declared some uses of water to be nonbeneficial. For example, in the

20. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(d).

21. 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02.

22. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(d)(1).

23. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(d)(2).

24. 1905 N.D. Laws ch. 34, § 2.

25. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.02(c)(1).

26. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.02(c)(2), at 24-25.

27. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.02(c)(2), at 24-25.

28. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 12.02(c)(2), at 26.

1970s when the prospects for developing coal slurry pipelines were good,²⁹ several states became concerned with the quantity of water that would be required to mix with the coal to create the slurry, which in turn would be transported out of the state, and enacted prohibitory statutes.³⁰ Oklahoma provided simply: "No Oklahoma water from any source shall be used in connection with the transportation, maintenance or operation of a coal slurry pipeline within or through the State of Oklahoma."³¹

Frank Trelease recounts how the "reasonableness" aspect came into play as a part of prior appropriation doctrine.³² While the focus on reasonableness occurs more in the context of conveyance and application methods rather than the end use to which the water is put,³³ it can have ramifications as to end use as well.

The evolutionary aspect of beneficial/reasonable use under prior appropriation doctrine is captured in the following excerpt from an opinion by Judge Bakes of the Idaho Supreme Court:

What we have decided in this case is that the use now before us, although not specifically listed in . . . the [Idaho] Constitution, is beneficial because, considering today's circumstances, the legislative classification is reasonable based on the record. I would restrict today's holding to the narrow proposition that the use before us is beneficial so long as, and only so long as, the circumstances of water use in the state have not changed to the extent that it is no longer reasonable to continue this use at the expense of more desirable uses for more urgent needs. It should receive the same treatment as all other non-constitutional beneficial uses. The use before us is beneficial when considered in the abstract because a non-consumptive use of

29. See BARLOW BURKE, JR. ET AL., *MINERAL LAW CASES AND MATERIALS* 339 (1994) (stating that in October of 1979 there were eight planned and proposed slurry pipelines, "sounding the advent of the slurry pipeline development era").

30. In fact, one slurry pipeline effort spawned major water litigation. See *ETSI Pipeline Project v. Missouri*, 484 U.S. 495 (1988).

31. OKLA. STAT. ANN. tit. 27, § 7.6 (West 1997). Montana enacted a similar statute in 1979, but repealed it in 1985. See MONT. CODE § 85-2-104 (1979) ("[T]he use of water for the slurry transport of coal is not a beneficial use of water."). Of course there are no immediate prospects for coal slurry pipeline development, so the threat appears to be over.

32. See generally Frank J. Trelease, *The Concept of Reasonable Beneficial Use in the Law of Surface Streams*, 12 WYO. L.J. 1 (1956).

33. See 2 WATER AND WATER RIGHTS, *supra* note 3, § 12.02(c)(2), at 28-34. See, e.g., MONT. CODE ANN. § 85-2-401(1) (1999):

Priority of appropriation does not include the right to prevent changes by later appropriators in the condition of water occurrence, such as the increase or decrease of streamflow or the lowering of a water table, artesian pressure, or water level, if the prior appropriator can reasonably exercise the water right under the changed conditions.

water at Malad Canyon to preserve a scenic attraction, both for aesthetic and recreational purposes, is desirable and beneficial, and because the demands upon the water resources of this state are not so severe that this use, which is beneficial when considered alone, becomes unreasonable and not beneficial when considered in conjunction with all of the water resource development needs in the state.³⁴

However, there do not appear to be any instances where courts have declared that a use has terminated because the use though once beneficial is no longer beneficial.³⁵ Instead what has happened is the application of the common law abandonment doctrine³⁶ and the legislatively imposed forfeiture doctrine,³⁷ both of which are based on nonuse of all or part of the previously used water. However, the former doctrine focuses on intent³⁸ and the latter on time lapse.³⁹

In 1994, in a case where the U.S. Fish and Wildlife Service was seeking a water permit from the state of South Dakota for a wildlife refuge,⁴⁰ protestors cited an early Utah case⁴¹ for the proposition that appropriating water to cultivate food for wildlife and waterfowl is not a beneficial use. The South Dakota Supreme Court responded by saying, "[T]he weight of authority indicates that 'beneficial use is an evolving concept, and a concept that can be expanded to reflect changes in society's recognition of the value of new uses of our resources,'"⁴² and by holding that it was not error to conclude that "maintenance and protection of waterfowl habitat was a beneficial use."⁴³

III. THE USE PREFERENCES THAT HAVE BEEN CREATED

This section delineates four sources of existing use preferences: (a) common law riparian and groundwater doctrines; (b) federal law

34. State Dep't of Parks v. Idaho Dep't of Water Admin., 530 P.2d 924, 932 (Idaho 1974) (Bakes, J., concurring).

35. There have been some threats, however. See *Imperial Irrigation Dist. v. State Water Res. Bd.*, 275 Cal. Rptr. 250 (1990) (involving Board order to repair defective tailwater structure and to prepare conservation plan). "It [the District] has only vested rights to the 'reasonable' use of water. It has no right to waste or misuse water." *Id.* at 261.

36. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 17.03(a).

37. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 17.03(b).

38. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 17.03(a).

39. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 17.03(b).

40. See *In re Water Right Claim No. 1927-2*, 524 N.W.2d 855 (S.D. 1994).

41. See *Lake Shore Duck Club v. Lake View Duck Club*, 166 P. 309 (Utah 1917).

42. *In re Water Right Claim No. 1927-2*, 524 N.W.2d at 858 (quoting Rick A. Thompson, *Statutory Recognition of Instream Flow Preservation: A Proposed Solution for Wyoming*, 17 LAND & WATER L. REV. 139, 143 (1982)).

43. *Id.*

including interstate compacts; (c) public trust doctrine and state sovereignty; and (d) state statutes and constitutions.

A. COMMON LAW RIPARIAN AND GROUNDWATER DOCTRINES

Under common law riparian doctrine, the natural flow concept favors nonconsumptive uses over consumptive uses,⁴⁴ and had early judicial flirtation with the concept come to full fruition,⁴⁵ certain uses would have been preferred uses simply by their dependence on natural flow. However, reasonable use doctrine generally supplanted natural flow,⁴⁶ but even with a natural flow concept, the necessity of some consumption was recognized, particularly for domestic use. Under riparian reasonable use doctrine, domestic use, or as sometimes labeled “natural” use, was to become the preferred use over uses labeled as “artificial” uses.⁴⁷ Thus in any contest between domestic and artificial uses where there was insufficient water for both, the domestic use would prevail. As to a conflict between domestic users, what authority there is suggests that natural superiority would prevail,⁴⁸ so that the further upstream you were, the better protected your right.

One of the early classic cases espousing the domestic/artificial distinction is *Evans v. Merriweather*.⁴⁹ Evans’ employee obstructed and diverted a water course, and Merriweather sued.⁵⁰ Both Evans and Merriweather were operating mills on the water course, and in 1837 during a drought an employee diverted all of the water so that the watercourse dried up.⁵¹ The court put the question and answer as follows:

[I]s that a reasonable use of running water by the upper proprietor, by which the fluid itself is entirely consumed? To answer this question satisfactorily, it is proper to consider the wants of man in regard to the element of water. These wants are either natural or artificial. Natural are such as are absolutely necessary to be supplied, in order to his existence. Artificial, such only as, by supplying them, his comfort and prosperity are increased. To quench thirst, and for household purposes, water is absolutely indispensable. In civilized life, water for

44. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(c).

45. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(c).

46. See discussion *supra* Part II.

47. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(b)(1); see also *infra* text accompanying note 52.

48. See *infra* text accompanying note 53.

49. 4 Ill. (3 Scam.) 492 (1842).

50. See *Evans v. Merriweather*, 4 Ill. (3 Scam.) 492, 494 (1842).

51. See *id.*

cattle is also necessary. These wants must be supplied, or both man and beast will perish.⁵²

With natural wants “[e]ach proprietor in his turn may, if necessary, consume all the water for these purposes.”⁵³ But the uses in *Evans* were not natural wants, and thus, “the question must be left to the judgment of the jury, whether the party complained of has used, under all the circumstances, more than his just proportion.”⁵⁴

As this distinction between domestic and artificial uses developed, there were of course issues as to what was included within domestic use. The major issues focused on applicability to a municipality⁵⁵ and to large cattle enterprises.⁵⁶ And the *Evans* court itself acknowledged that “[i]n . . . a hot and arid climate, water doubtless is absolutely indispensable to the cultivation of the soil, and in them, water for irrigation would be a natural want.”⁵⁷

As noted in the previous section, under riparian reasonable use doctrine, no uses were declared per se unreasonable,⁵⁸ but it should also be noted that riparian uses may be controlled by preferred uses created outside the riparian doctrine system, such as uses sanctioned by

52. *Id.* at 495.

53. *Id.* at 496.

54. *Id.*

55. See *Pernell v. City of Henderson*, 16 S.E.2d 449, 451 (N.C. 1941), citing, among many authorities, 1 HENRY P. FARNHAM, *THE LAW OF WATERS AND WATER RIGHTS* 611 (1904):

The rule giving an individual the right to consume water for his domestic needs is founded upon the needs of the single individual and the possible effect which his use will have on the rights of others, and cannot be expanded so as to render a collection of persons numbering thousands, organized into a political unit, a riparian owner, and give this unit the right of the natural unit.

56. “Ordinary or natural uses have been held to include the use for domestic purposes, including household purposes, such as cleansing, washing, and supplying an ordinary number of horses or stock with water” *Kundel Farms v. Vir-Jo Farms, Inc.*, 467 N.W.2d 291, 294 (Iowa Ct. App. 1991) (emphasis added).

Vir-Jo desires to use the water in Crane Creek for watering stock and other agricultural purposes. Kundel uses the water to make a wetland so four hunters may rent the land for \$1,000 a year. While we find neither use unreasonable, creating a wetland for hunting certainly is an artificial use. As such Vir-Jo’s natural use of the stream to water his livestock takes precedence.

Id. at 295. However, the court does not mention how many cattle Vir-Jo has. Professor Gross states that the stock watering privilege was limited to stock “ordinarily kept to sustain the needs of man” and that it did not extend to where “the primary object is to raise for the market.” Gross, *supra* note 4, at 264 n.5.

57. 4 Ill. (3 Scam.) at 495. But Professor Gross noted that courts had been “quite hesitant in classifying irrigation as a natural want.” Gross, *supra* note 4, at 264 n.6.

58. Uses were prohibited on nonriparian land. See 1 *WATERS AND WATER RIGHTS*, *supra* note 2, § 7.02(d)(1), at 245-46. However, that is an exception based on location and not on what the water is used for.

the public trust doctrine⁵⁹ and the public right to navigate.⁶⁰ These preferred uses are discussed later.⁶¹

Except for underground water that was treated as part of a surface stream⁶² or that was located in an underground stream,⁶³ use preferences did not develop at common law for groundwater.⁶⁴ In these two excepted situations, the same law would apply to the groundwaters as applied to the surface waters.⁶⁵

The law applied to groundwater developed separately from the law applied to surface waters because of the inability to know what was going on underground when specific cases about groundwater first arose.⁶⁶ Instead, courts adopted principles for solving groundwater disputes that would allow the courts to solve the disputes without the necessity of looking underground. Thus, the concept of absolute ownership of groundwater, which allowed the surface owner to capture as much as he could, developed and still exists in several jurisdictions today.⁶⁷ However, many states modified the absolute ownership doctrine by prohibiting malicious conduct and by prohibiting the wasting of water.⁶⁸ These modifications were possible because neither one required that the courts look underground to make the necessary determination. Later in reviewing the totality of a state's groundwater law, courts began to conclude that with these modifications, in reality what the jurisdiction was applying was a reasonable use rule.⁶⁹ That appears to be how the American reasonable use rule came into being.⁷⁰ This rule looks solely to the conduct of the water user whose conduct is being complained about⁷¹ as contrasted with the *Restatement of Torts* reasonable use rule which seeks to balance the

59. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 30.02.

60. See generally 4 WATERS AND WATER RIGHTS, *supra* note 16, Part VI.

61. See discussion *infra* Part III.C.

62. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 11.06(c)(1), at 37-38.

63. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 11.06(c)(1), at 36-37.

64. Of course in the balancing process under a reasonable use rule, it may be applied so that even a prior use "can be extinguished or at least receive a lower preference as against a subsequent use that is deemed to have a lower preference as against a subsequent use that is deemed to have a greater economic or social value." James Ellsworth Craig, Comment, *Beyond the Cabin on the Bank, Ohio Groundwater Law in Transition*, 13 OHIO N.U. L. REV. 537, 546 (1986).

65. See 3 WATERS AND WATER RIGHTS § 20.07(a) (Robert E. Beck ed., 1991 & Supp. 1999).

66. See *id.* §§ 20.02, 20.03.

67. See generally *id.* ch. 21.

68. See *id.* § 21.02.

69. See generally *id.* ch. 23.

70. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 4.05(c).

71. See generally 3 WATERS AND WATER RIGHTS, *supra* note 65, ch. 23.

benefits and harms of the respective water uses.⁷² Only in the application of the balancing reasonable use rule might a court extend the surface water domestic versus artificial uses distinction.

B. FEDERAL LAW (INCLUDING INTERSTATE COMPACTS ⁷³)

Navigation was an important historical use of water in the United States⁷⁴ and is still important in many areas of the United States.⁷⁵ The U.S. Constitution gives Congress power to "regulate Commerce . . . among the several States."⁷⁶ Because early commerce occurred primarily on the waterways, Congress early on established power over navigable waters,⁷⁷ and to this day federal approval is required by a government or individual before any alteration can be made in navigable waters.⁷⁸ Because federal law is the supreme law of the land,⁷⁹ navigation becomes a preferred use and any use inconsistent therewith is, or can be, subordinated; that use still trumps although there are limits on its scope.⁸⁰ Congress can of course determine that navigation shall not maintain a preferred status as it has done in some of its water-related legislation.⁸¹

The early interest in navigation was followed by other federal interests. With the Reclamation Act of 1902,⁸² the Federal Power Act of 1920,⁸³ the Flood Control Acts of 1928,⁸⁴ 1936,⁸⁵ 1944,⁸⁶ and 1948,⁸⁷

72. See RESTATEMENT (SECOND) OF TORTS § 858 (1977); 3 WATERS AND WATER RIGHTS, *supra* note 65, § 20.07(b)(5).

73. See *Intake Water Co. v. Yellowstone River Compact Comm'n*, 769 F.2d 568, 570 (9th Cir. 1985) ("Thus, as a federal law, the Compact authorizes those actions included within its provisions.").

74. See JOSEPH K. ANGELL, A TREATISE ON THE LAW OF WATERCOURSES § 536 (6th ed. 1869).

75. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 2.04(i).

76. U.S. CONST. art. III, § 8, cl. 3.

77. See *Gilman v. City of Philadelphia*, 70 U.S. (3 Wall.) 713 (1865), for a discussion of the extent to which Congress had exercised power over navigation and a recognition of Congress's power to act further. See also *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824). See generally 4 WATERS AND WATER RIGHTS, *supra* note 16, § 35.02.

78. See Rivers and Harbors Appropriation Act of 1899, ch. 425, § 9, 30 Stat. 1151 (codified as amended at 33 U.S.C. §§ 401-467n (1994 & Supp. IV 1998)).

79. See U.S. CONST. art. VI, cl. 2.

80. See *Kaiser Aetna v. United States*, 444 U.S. 164 (1979).

81. See Flood Control Act of 1944, Pub. L. No. 78-534, § 1(c), 58 Stat. 887, 889 (codified as amended at 33 U.S.C. § 701-1(b) (1994), referred to as the O'Mahoney-Milliken Amendment, and extended to other legislation); see also Gene Olson, *The O'Mahoney-Milliken Amendments: The West Sinks the Navigation Power*, 65 N.D. L. REV. 91, 112-126 (1989); *infra* text accompanying notes 112-13.

82. Ch. 1093, 32 Stat. 388 (codified as amended in scattered sections of 43 U.S.C.); see also 4 WATERS AND WATER RIGHTS, *supra* note 16, § 41.02.

83. Ch. 285, 41 Stat. 1063 (codified as amended at 16 U.S.C. §§ 791-823a (1994 & Supp. IV 1998)); see also 4 WATERS AND WATER RIGHTS, *supra* note 16, § 40.02.

84. Ch. 569, 45 Stat. 534 (codified as amended at 33 U.S.C. §§ 702a-702m (1994)).

85. Ch. 688, 49 Stat. 1570.

86. Pub. L. No. 78-534, ch. 665, 58 Stat. 887.

87. Ch. 771, 62 Stat. 1182 (codified as amended at 33 U.S.C. § 701s (1994)). Numerous other acts amended and added to the base acts identified in the text. See 5 WATERS AND WATER RIGHTS, *supra* note 6, § 60.03.

and the Watershed Protection and Flood Prevention Act of 1954,⁸⁸ Congress exercised substantial control over the water resources of the United States. In several instances Congress even acted to apportion source waters among several states.⁸⁹

Preferences for the use of water have been created as a result of at least some of this federal legislation. Under the Reclamation Act, a preference for irrigation was established.⁹⁰ With the Federal Power Act a preference for damming streams and generating power was created.⁹¹ Despite the fact that Congress specified multiple purposes for flood control projects,⁹² federal management gave low priority to some uses, particularly recreational use,⁹³ thus favoring other uses, particularly navigation.⁹⁴ While all of these preferences have been, or are being, modified to some extent,⁹⁵ it cannot be said that they have been fully abrogated.

Then, with the Wilderness Act of 1964,⁹⁶ the Wild and Scenic Rivers Act enacted in 1968,⁹⁷ and the Endangered Species Act of 1973,⁹⁸ Congress moved into new areas of concern that have a direct relationship with the water resource—environmental and ecosystem protection.⁹⁹

88. Pub. L. No. 83-566, ch. 656, 68 Stat. 666 (codified as amended at 16 U.S.C. §§ 1001-1008 (1994 & Supp. IV 1998)); *see also* 5 WATERS AND WATER RIGHTS, *supra* note 6, § 60.05(b).

89. *See Arizona v. California*, 373 U.S. 546 (1963) (interpreting the Boulder Canyon Project Act of 1928, Pub. L. No. 642, 45 Stat. 1057 (1928) (codified as amended at 43 U.S.C. §§ 617-617i (1994)), as having apportioned the lower Colorado River among Arizona, California, and Nevada). The Truckee-Carson-Pyramid Lake Water Rights Settlement Act of 1990, Pub. L. No. 101-618, Tit. II, 104 Stat. 3289 (1990), apportions the waters of Lake Tahoe and the Truckee and Carson Rivers between California and Nevada. *See* 4 WATERS AND WATER RIGHTS, *supra* note 16, § 47.01(b).

90. *See* 4 WATERS AND WATER RIGHTS, *supra* note 16, § 41.02. This preference hinders the transfer of water to other needed uses. *See* 2 WATERS AND WATER RIGHTS, *supra* note 3, § 14.01(b)(1).

91. *See* 4 WATERS AND WATER RIGHTS, *supra* note 16, §§ 40.02, 40.07; *see also* *First Iowa Hydro-Elec. Coop. v. Federal Power Comm'n*, 328 U.S. 152 (1946).

92. *See, e.g.*, Flood Control Act of 1936, 49 Stat. 1570, 1572 § 5 (1936) ("for the benefit of navigation and the control of destructive flood waters and other purposes").

93. *See* U.S. GENERAL ACCOUNTING OFFICE, CORPS' MANAGEMENT OF ONGOING DROUGHT IN THE MISSOURI RIVER BASIN 4-5 (1992).

94. *See id.* at 3.

95. *See, e.g.*, *A Fight Over Fish and Birds Heats Up the Struggle for Control of the Missouri River*, ST. LOUIS POST-DISPATCH, July 23, 2000, at A12.

96. Pub. L. No. 88-577, 78 Stat. 890 (codified as amended at 16 U.S.C. §§ 1131-1136 (1994)); *see also* *Sierra Club v. Yeutter*, 911 F.2d 1405 (10th Cir. 1990); 4 WATERS AND WATER RIGHTS, *supra* note 16, § 37.03(a)(5).

97. Pub. L. No. 90-542, 82 Stat. 906 (1968) (codified as amended at 16 U.S.C. §§ 1271-1287 (1994 & Supp. IV 1998)); *see also* 4 WATERS AND WATER RIGHTS, *supra* note 16, § 37.03(a)(4).

98. Pub. L. No. 93-205, 87 Stat. 884 (1973) (codified as amended at 16 U.S.C. §§ 1531-1543 (1994)).

99. There are of course many other federal statutes relating to water, particularly the quality of water, such as the Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972) (codified as amended at 33 U.S.C. §§ 1251-1387 (1994 & Supp. IV 1998)), and the Safe Drinking Water Act enacted in 1974, 88 Stat. 1661 (1974) (codified as amended at 42 U.S.C. §§ 300f to 300j-26 (1994)), but these cannot be said to establish preferred uses, although some uses may get prohibited because of an inability to meet quality standards and limitations.

These laws also implicate preferred uses, except to the extent that the federal government has indicated that there shall be no preference.¹⁰⁰ At least the first two of these Acts implicate federal reserved water rights;¹⁰¹ thus it becomes necessary to discuss the scope of such rights.

Because federal reserved rights are established under the supreme law of the land,¹⁰² they come into being without complying with state law and have preferred status over subsequently created state water rights.¹⁰³ Because these reserved water rights focus on particular uses and are measured by how much water is necessary for that use,¹⁰⁴ they are properly considered as a part of use preference law. Reserved water rights may come into being when the federal government sets aside, or "reserves" public lands for a particular purpose, whether as a national forest or a national park, or as in the case of the two acts noted above, wilderness and wild and scenic rivers.¹⁰⁵ Based on the notion that only such water as is necessary for the principal purpose or purposes of the reservation, the United States Supreme Court found, in *United States v. New Mexico*,¹⁰⁶ that the reserved right for national forests is limited to the water necessary for timber production and for watershed protection, rejecting water claims for fish, wildlife, recreation, stockwatering, and aesthetic purposes.¹⁰⁷

Other federal statutes that establish statutory preferences for certain types of uses, do not necessarily implicate reserved rights. Thus under the Endangered Species Act,¹⁰⁸ no reserved right comes into being,¹⁰⁹

100. See the differences of opinion expressed in *In re SRBA*, No. 39576, 1999 WL 778325 (Idaho Oct. 1, 1999), *superseded on reh'g sub. nom.* Potlach Corp. v. United States, 12 P.3d 1260 (Idaho 2000), as to the creation of wilderness areas.

101. See *In re SRBA*, 1999 WL 778325 (Idaho 1999). In 16 U.S.C. § 1284(c), Congress expressly reserves water "in quantities . . . necessary to accomplish [the wild and scenic rivers'] purposes."

102. See *Arizona v. California*, 373 U.S. 546 (1963); *Winters v. United States*, 207 U.S. 564 (1908).

103. See *Arizona*, 373 U.S. 546; *Winters*, 207 U.S. 564.

104. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 37.02(c).

105. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 37.03(a), where the author discusses eight categories. Reserved rights developed first in the context of Indian reservations, but such reservations could have been reserved either by the Indians themselves or by the federal government for the Indians. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 37.01(b).

106. 438 U.S. 696 (1978).

107. See *United States v. New Mexico*, 438 U.S. 696, 718 (1978); see also Janet C. Neuman & Michael C. Blumm, *Water for National Forests: The Bypass Flow Report and the Great Divide in Western Water Law*, 18 STANF. ENVTL. L.J. 3 (1999); Eric T. Freyfogle, *Repairing the Waters of the National Parks: Notes on a Long-term Strategy*, 74 DENV. U. L. REV. 815 (1997).

108. Pub. L. No. 93-205, 87 Stat. 884 (1973) (codified as amended at 16 U.S.C. §§ 1531-1543 (1994)).

109. There are those who argue that such a right should be created and quantified in order to make the demands on the water resource more certain. See, e.g., Bennett W. Raley, *Chaos in the Making: The Consequences of Failure to Integrate Federal Environmental Statutes with McCarran Amendment Water Adjudications*, 41 ROCKY MTN. MIN. L. INST. 24-1 (1995); A. Dan Tarlock, *The Endangered Species Act and Western Water Rights*, 20 LAND & WATER L. REV. 1, 13-30 (1985).

but federal land and water managers are obligated to manage the resources under their jurisdiction so that the management method does not jeopardize an endangered or threatened species.¹¹⁰ This indeed creates a preferred use of water for endangered species protection.¹¹¹

Interstate compacts also contain preferences for various water uses. The Colorado River Compact¹¹² provides that use of the water for navigation "shall be subservient to the uses of such waters for domestic, agricultural, and power purposes."¹¹³ Use of water for generating electric power is, in turn, made subservient to use of the water for "agricultural and domestic purposes."¹¹⁴ Under the Snake River Compact¹¹⁵ use of water for power production is subservient to domestic, stock, and irrigation purposes and they are referred to as "preferred purposes."¹¹⁶ The Belle Fourche River Compact¹¹⁷ gives Wyoming, in addition to its allocation, a right to use water "for domestic and stock use."¹¹⁸ Under the Canadian River Compact,¹¹⁹ Texas's right to impound waters of the North Canadian River is limited to storage for "municipal uses, for household and domestic uses, livestock watering, and the irrigation of lands which are cultivated solely for the purpose of providing food and feed for the householders and domestic livestock actually living or kept on the property."¹²⁰ The Klamath River Basin Compact,¹²¹ provides that when there are competing applications, each state is to give preference "for a higher use over applications for a lower use in accordance with the following order of uses: (a) Domestic use, (b) Irrigation use, (c) Recreational use, including use for fish and wildlife, (d) Industrial use, (e) Generation of hydroelectric power, (f) Such other uses as are recognized under the laws of the state involved."¹²²

110. See 5 WATERS AND WATER RIGHTS, *supra* note 6, § 62.02(f)(3). Furthermore, private citizens are prohibited from taking an endangered species. See *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995). It is possible that under some circumstances destruction of habitat on private land by a private citizen will result in a taking. See *id.*

111. See *id.*; see also *Tennessee Valley Auth. v. Hill*, 437 U.S. 153 (1978).

112. 70 CONG. REC. 324 (1928). The compact was approved by Congress at 45 Stat. 1057, 1064 (1928).

113. 70 CONG. REC. 325, art. IV(a), at 325.

114. *Id.*, art. IV(b).

115. 64 Stat. 29 (1950).

116. *Id.*, art. V, at 31.

117. 58 Stat. 94 (1944).

118. *Id.*, art. V, at 96. Article VIII of the compact also contains a preference for stock water use. See *id.*, art. VIII, at 97.

119. 66 Stat. 74 (1952).

120. *Id.*, art. V(a), at 75.

121. 71 Stat. 497 (1957).

122. *Id.*, art. III(B)(1), at 498-99.

C. PUBLIC TRUST DOCTRINE AND STATE SOVEREIGNTY

The public trust doctrine¹²³ posits that states hold the title to the land under navigable waters “in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties.”¹²⁴ Because of the uncertainty about the source of the doctrine,¹²⁵ it is treated here in a separate section along with the concept of state sovereignty over land and water, a concept that the public trust doctrine is often associated with.¹²⁶ Because of the trust nature of the title, it is clear that in most, if not all, states there are limits on the extent to which, if at all, a state can override the uses of water contemplated under the trust.¹²⁷ To the extent that states cannot override the uses, navigation, commerce, and fishing are preferred uses of the water. Some jurisdictions apply the doctrine to the water resource itself and not just to land underlying water.¹²⁸ And many jurisdictions have expanded the uses to which the doctrine applies to include recreational uses.¹²⁹

If the public trust doctrine does not create the public right to navigate, that right must come from some aspect of state sovereignty.¹³⁰ Looking at the question of the public right to navigate strictly from a state sovereignty perspective, and not implicating the public trust doctrine, many states are on record as recognizing a right of navigation in the public.¹³¹ Thus the California Supreme Court took quite an assertive position in 1884: “[N]either state nor federal legislatures could, by silent acquiescence, or by attempted legislation . . . divest the people of the state of their rights in the navigable waters of the State for the use of a private business, however extensive or long continued.”¹³² Some states apply a servitude concept¹³³ to allow the state to destroy access to

123. See generally 4 WATERS AND WATER RIGHTS, *supra* note 16, § 30.02.

124. *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 452 (1892).

125. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 30.02(a).

126. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 30.02(a).

127. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 30.02(d).

128. See *National Audubon Soc’y v. Superior Court*, 658 P.2d 709 (Cal. 1983); *United Plainsmen Ass’n v. North Dakota State Water Conservation Comm’n*, 247 N.W.2d 457 (N.D. 1976).

129. See 4 WATERS AND WATER RIGHTS, *supra* note 16, § 31.02(a).

130. See *supra* text accompanying notes 74-81, for discussion of the federal relationship to navigation.

131. See generally 4 WATERS & WATER RIGHTS, *supra* note 16, chs. 29, 30. Some states find a public right to navigate in state constitutional provisions relating to water. See *Montana Coalition for Stream Access, Inc. v. Hildreth*, 684 P.2d 1088 (Mont. 1984); *Day v. Armstrong*, 362 P.2d 137 (Wyo. 1961).

132. *People v. Gold Run Ditch & Mining Co.*, 4 P. 1152, 1159 (Cal. 1884).

133. See *Colberg, Inc. v. State ex rel. Dep’t of Pub. Works*, 432 P.2d 3 (Cal. 1967).

water without compensation.¹³⁴ Other states, however, have rejected that servitude approach on the basis that access to water is too important.¹³⁵

D. STATE STATUTES AND CONSTITUTIONS

State statutes in both riparian and prior appropriation states contain preferred uses for water. Some prior appropriation states have preferences in their constitutions as well. For example, Colorado, when it adopted its constitution in 1876, included the following preference language:

[W]hen the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for *domestic purposes* shall have the preference over those claiming for any other purpose, and those using the water for *agricultural purposes* shall have preference over those using the same for *manufacturing purposes*.¹³⁶

The Idaho¹³⁷ and Nebraska¹³⁸ constitutions contain essentially the same provisions, but Idaho adds a mining use preference.¹³⁹

Early riparian state statutes focused on establishing preferences for single uses such as in the Mill Acts.¹⁴⁰ Eighteen of the thirty-one eastern riparian states have substantial legislative modification of the common law riparian system, including the establishment of permit systems.¹⁴¹ Some uses under these statutes do not require permits, which raises the question as to whether those uses should be treated as preferred uses.¹⁴²

Many of these riparian state statutes contain express use priorities.¹⁴³ They tend to amplify on the common law division between domestic, or natural, uses on the one hand, and artificial uses on the

134. *See id.* In this case the destruction came not to benefit a private business but to benefit the state in building bridges across the waterway.

135. *See, e.g.,* Wernberg v. State, 516 P.2d 1191, 1201 (Alaska 1973) (stating that there are "many isolated communities whose only means of access is by water").

136. COLO. CONST. art. XVI, § 6 (emphasis added).

137. *See* IDAHO CONST. art. XV, § 3; *see also* State Dep't of Parks v. Idaho Dep't of Water Admin., 530 P.2d 924 (Idaho 1974); Basinger v. Taylor, 164 P. 522 (Idaho 1917).

138. *See* NEB. CONST. art. XV, § 6; *see also* NEB. REV. STAT. §§ 46-204, 46-613 (1998).

139. *See* IDAHO CONST. art. XV, § 3 ("And in any organized mining district those using the water for mining purposes or milling purposes connected with mining, shall have preference over those using the same for manufacturing or agricultural purposes.").

140. *See* 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.02(b)(2), at 232, § 9.02(a).

141. *See* 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03.

142. Professor Dellapenna so treats them, *see* 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03(a)(3), and I have no particular basis to quarrel with his conclusion. Exemption of domestic users and agricultural users from the permit requirement seem the most universal. These exemptions are either express or as a result of the exemption of users of small quantities, who usually will be located in rural areas. *See* 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03(a)(3).

143. *See* 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03(a)(3).

other hand.¹⁴⁴ Thus the Arkansas statute that provides for allocating water among users during a water shortage specifies that "the commission may consider the use that each person . . . is to make of the water."¹⁴⁵ The statute provides overall preference in allocation to: first, "sustaining life;" second, "maintaining health;" and third, "increasing wealth."¹⁴⁶ It specifies as recognized uses: "domestic and municipal water supply needs, agricultural and industrial water needs, and navigational, recreational, fish and wildlife, and other ecological needs"¹⁴⁷ but provides that: "The following priorities shall be reserved prior to allocation: (1) Domestic and municipal domestic; (2) Minimum streamflow; and (3) Federal water rights."¹⁴⁸ Although these reservations are listed as "one," "two," and "three," there is no statement as to order of preference among the three, unlike with the overall preferences where the statute clearly provides for three levels of priority.¹⁴⁹ The assumption appears to be that all three of these reserved uses will be satisfied.

Prior appropriation statutes started out with hierarchical lists that became longer as uses were subdivided or added and unused water became scarcer. North Dakota exemplifies this evolution with the original 1963 list and its context reading as follows: "*In all cases* where the use of water for different purposes conflict such uses shall conform to the following order of priority: 1. Domestic use. 2. Livestock Use. 3. Irrigation and industry."¹⁵⁰ The revision that North Dakota made in 1977 affected both the list and the context: "When there are competing applications for water from the same source, and the source is insufficient to supply all applicants, the state engineer shall adhere to the following order of priority: 1. Domestic use. 2. Municipal use. 3. Livestock use. 4. Irrigation use. 5. Industrial use. 6. Fish, wildlife, and outdoor recreational uses."¹⁵¹

Frank Trelease surveyed all seventeen coterminous western states in 1955¹⁵² and indicated that only five states, Montana, Nevada, North

144. See *supra* text accompanying notes 49-54.

145. ARK. CODE ANN. § 15-22-217(b) (Michie 2000).

146. *Id.* § 15-22-217(c).

147. *Id.* § 15-22-217(d).

148. *Id.* § 15-22-217(e).

149. See *id.* § 15-22-217(c).

150. 1963 N.D. Laws ch. 419, § 1 (creating N.D. CENT. CODE § 61-01-01.1 (repealed 1977)) (emphasis added). The statute defined both domestic use and livestock use. See *id.*

151. 1977 N.D. Laws ch. 569, § 11 (codified as amended at N.D. CENT. CODE § 64-04-06.1 (1995)).

152. See Trelease, *supra* note 1, at 143-58. Hutchins had done this in 1942. See WELLS A. HUTCHINS, SELECTED PROBLEMS IN THE LAW OF WATER RIGHTS IN THE WEST 337-45 (USGPO 1942).

Dakota, South Dakota, and Washington, did not have water use preference lists.¹⁵³ However, now Montana provides that in “controlled ground water areas,”¹⁵⁴ groundwater withdrawals can be limited “for domestic and livestock purposes first and then to withdrawals for other beneficial purposes, including but not limited to agricultural, industrial, municipal (other than domestic), and recreational purposes, in the order that the department considers advisable under the circumstances.”¹⁵⁵ Nevada also now has a preference provision relating to groundwater.¹⁵⁶ North Dakota has the provision already discussed.¹⁵⁷ South Dakota provides at least that the “use of water for domestic purposes is the highest use of water” and is preferred over other uses.¹⁵⁸ Washington gives authority to the Department of Ecology to reserve water for future use¹⁵⁹ and provides that reservations of water by the department “for agriculture, hydroelectric energy, municipal, industrial, and other beneficial uses . . . or minimum flows or levels . . . shall constitute appropriations.”¹⁶⁰ This statutory language appears to give the Department some authority to establish preferences based on use. Furthermore, Washington now, like many states,¹⁶¹ establishes minimum stream flows and lake levels and specifies that its minimum levels are “for the purposes of protecting fish, game, birds or other wildlife resources, or recreational or aesthetic values of said public waters.”¹⁶² Assuming that it is truly a minimum that can and will be enforced, Washington is establishing a preferred use for that water.

153. See Trelease, *supra* note 1, at 149-50, 151-52, 154, 157.

154. MONT. CODE ANN. § 85-2-506 (1999).

155. *Id.* § 85-2-507(4)(c).

156. See NEV. REV. STAT. ANN. § 534.120(2) (Michie Supp. 1999) (giving the state engineer authority to designate preferred uses in areas where the groundwater basin is being depleted “within the following limits: Domestic, municipal, quasi-municipal, industrial, irrigation, mining and stock-watering uses and any uses for which a county, city, town, public water district or public water company furnishes the water”).

157. See *supra* text accompanying notes 150-51.

158. S.D. CODIFIED LAWS § 46-1-5 (Michie 1999). South Dakota generally prohibits transfer of irrigation water to any but domestic use or fire protection use. See *id.* § 46-5-34.1. This provision in effect creates a preference for irrigation use over all uses except domestic or fire protection.

159. See WASH. REV. CODE ANN. § 90.54.050 (West Supp. 2000).

160. *Id.* § 90.03.345 (West 1992).

161. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 13.05(a) (prior appropriation doctrine states), § 15.03(c)(4)(C) (prior appropriation doctrine states); 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.05(b) (riparian doctrine states).

162. WASH. REV. CODE ANN. § 90.22.010 (West Supp. 2000).

In addition, California,¹⁶³ and apparently New Mexico¹⁶⁴ have used a concept known as the pueblo rights doctrine to give preference to a qualifying municipality to the water necessary for municipal uses within its territorial boundaries.¹⁶⁵ Oeltjen and Fischer refer to the preference thus established as absolute.¹⁶⁶ The settlements would have to have arisen under Spanish or Mexican law, although there is considerable controversy over the existence of the concept as a part of either Spanish or Mexican law.¹⁶⁷

If status in the pecking order for water depends on use classifications, the assignment of a specific use to a particular class would be important. Use classifications can be ambiguous. In a recent South Dakota case, the U.S. Fish and Wildlife Service sought water permits for maintaining marshes as waterfowl habitat on a National Wildlife Refuge.¹⁶⁸ The lower court concluded that using the water to raise crops that would be harvested by migratory waterfowl constituted irrigation, but held the operation to be a beneficial use even if the activity was not considered irrigation.¹⁶⁹ The South Dakota Supreme Court concluded that "appropriation of water for waterfowl habitat and other wildlife is a beneficial use."¹⁷⁰ For one of the water rights involved that was a sufficient determination, but for another water right involved, the court had to focus on irrigation. This right had originally been given for irrigation and the protester argued that approving the request would change the use from irrigation and violate the statutory provision that prevents changing the use of irrigation water.¹⁷¹ The South Dakota Supreme Court noted

163. See *City of Los Angeles v. City of San Fernando*, 537 P.2d 1250 (Cal. 1975); *City of Los Angeles v. City of Glendale*, 142 P.2d 289 (Cal. 1943); *City of San Diego v. Cuyamaca Water Co.*, 287 P. 475 (Cal. 1930); *Vernon Irrigation Co. v. City of Los Angeles*, 39 P. 762 (Cal. 1895) (adopting pueblo rights).

164. See *Cartwright v. Public Serv. Co.*, 343 P.2d 654 (1958); *City of Las Vegas v. Oman*, 796 P.2d 1121 (N.M. Ct. App. 1990) (adopting pueblo rights). *But see State ex rel. Martinez v. City of Las Vegas*, 880 P.2d 868 (N.M. Ct. App. 1994) (rejecting pueblo rights), *cert. granted*, 882 P.2d 21 (N.M. 1994); Pierre Levy, Case Note, *Which Right is Right: The Pueblo Water Rights Doctrine Meets Prior Appropriation*, 35 NAT. RESOURCES J. 413, 413 n.5 (1995) (noting that *Martinez* was settled prior to oral argument in the New Mexico Supreme Court).

165. Texas and Colorado have rejected its applicability. See *In re Contests of Laredo*, 675 S.W.2d 257 (Tex. Civ. App. 1984) (rejecting pueblo rights). In *American Water Development, Inc. v. City of Alamosa*, 874 P.2d 352 (Colo. 1994), the Colorado Supreme Court ruled *en banc* that the claimant did not have title to the groundwater underlying Baca Grant No. 4. First, the Grant did not derive from either the Mexican government or its Spanish predecessors. See *id.* at 362-64. Second, the Act of June 21, 1860, did not carry water rights that would have been recognized by the Mexican or Spanish governments. See *id.* at 365-66. This decision disposes of a major claim, if not the only one, to application of Spanish or Mexican law to water rights in Colorado.

166. See Oeltjen & Fischer, *supra* note 4, at 262.

167. See *Martinez*, 880 P.2d 868.

168. *In re Water Right Claim No. 1927-2*, 524 N.W.2d 855 (S.D. 1994).

169. See *id.*

170. *Id.* at 858.

171. Under South Dakota law irrigation rights can be transferred apart from appurtenant land

that the water “would provide habitat for waterfowl, including sloughs and marshlands with plant growth essential for waterfowl survival and propagation. Under . . . [the South Dakota regulations¹⁷²] the use remains for ‘irrigation’ by providing moisture for plant growth.”¹⁷³ As noted above,¹⁷⁴ South Dakota does not have a preference list as such. But most prior appropriation doctrine states do, and in most lists, use of water for irrigation is ranked much higher than use for wildlife. Thus under the North Dakota preference list,¹⁷⁵ where would this refuge use go? Would it be placed in category (4), “irrigation,” or in category (6), “fish, wildlife and outdoor recreational uses”? Similarly, if a classification scheme distinguished between agriculture and fish and wildlife, where would fish farming, a rapidly growing business,¹⁷⁶ be placed?

IV. FUNCTIONS SERVED BY THE EXISTING STATUTORY PREFERENCE LISTS

In 1955 Dean Trelease, in writing about state created use preference lists, concluded:

Throughout this mass of law runs a single unifying thread: some uses are more important than others and should receive some type of favored treatment. Yet it is strikingly apparent that the diversities in the law far outnumber the similarities. There is wide variation as to what shall be preferred and how the preference is to operate. There is general agreement only in that man’s personal needs come first, so that domestic and municipal purposes head every list, and there seems to be a fairly uniform resolve not to let waters run unused into the seas, with the consequence that power and navigation operations are generally found near the bottom.¹⁷⁷

But whatever the order of preference, Professor Gross, in his 1965 article on use preferences, summed up how the existing preferences operate:

In general, preferences have been applied in three ways: (1) as a consideration by the state agency weighing pending applications for appropriative rights; (2) in the granting of conditional

only for ordinary household purposes or fire protection. See S.D. CODIFIED LAWS § 46-5-34.1 (Michie 1999). This appears to give water used for irrigation, once in existence, a high preference.

172. See S.D. ADMIN. R. 74:02:01:01(4).

173. *In re Water Claim Right*, 524 N.W.2d at 859-60.

174. See *supra* text accompanying notes 153, 158.

175. See *supra* text accompanying note 151.

176. See Karen Binder, *Getting Hooked: Aquaculture Opportunities Tailor-made for Many Farmers Throughout the Region*, SOUTHERN ILLINOISAN, Oct. 1, 2000, at C1, col. 2.

177. Trelease, *supra* note 1, at 158. Oeltjen and Fischer concur in the finding of top priority for domestic use, noting, however, that what is meant by domestic use “varies from state to state.” Oeltjen & Fischer, *supra* note 4, at 260.

appropriation rights—made subject to subsequent preferred uses; and (3) as a basis for exercising the sovereign power of eminent domain.¹⁷⁸

Because of the historical interconnection among these three ways, it would not be productive to attempt discussing each one separate and apart from the others, although generally Gross's order will be followed in this discussion.

Apparently at least some of the state statutory preferred use lists were intended to condition permits or licenses for lower preference uses to allow those uses to be cut off without having to pay compensation when a higher use came along.¹⁷⁹ However, such an interpretation was generally either rejected by courts in the west or ignored by administrators. Rejection likely came on the basis that such a condition might discourage development of the water resource if the user knew that tomorrow it could be taken away without any compensation. Any development, whatever the water use, was to be preferred over no development, thus avoiding letting any water run to the sea. The result is that some state preferred use lists are simply lists to steer the first time allocations of water from a source, thus generally applying now only to favor one competing application over another. However, in many states preferred use lists may be used to allow a higher preferred use to condemn an existing lower preferred use. About the only situation any longer in which a preferred use list may lead to a true preference, that is may be used to stop an existing lower use in favor of an existing higher use is when there is a drought or other water emergency.¹⁸⁰ We may all be familiar with no lawn watering or car washing.¹⁸¹ Thus, for example, the Utah Code provides that "in times of scarcity, while priority of appropriation shall give the better right as between those using water for the same purpose, the use for domestic purposes, without unnecessary waste, shall have preference over use for all other purposes, and use for agricultural purposes shall have preference over use for any other purpose except domestic use."¹⁸² Finally, it is clear that today some

178. Gross, *supra* note 4, at 267.

179. Such a statute would have to qualify as a defense to a taking action under *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992).

180. Other causes of water shortages include a broken dam that sends a water supply cascading down the stream and a flood or other catastrophe that has contaminated a source of supply.

181. See generally 1 WATERS AND WATER RIGHTS, *supra* note 2, §§ 2.02, 2.03.

182. UTAH CODE ANN. § 73-3-21 (1989). In the eastern United States, to get an idea of variability, compare Iowa and Maryland. In a water supply emergency under Maryland law, users with permits are given the following order of preference: "(1) Domestic and municipal uses for sanitation, drinking water, and public health and safety; (2) Agricultural uses, including the processing of agricultural products; and (3) All other uses." MD. CODE ANN., ENVIR. § 5-502(d) (Supp. 2000). In a water supply emergency under Iowa law, uses can be suspended or restricted in the following order:

preferred use lists if not aiding in forced reallocation, impose limits on reallocation.¹⁸³

Although Gross, in the above excerpt,¹⁸⁴ says simply that preference lists are to be “a consideration” in the application for a water right process, that observation should be treated as a generality that encompasses different ways of “considering” the use categories in deciding whether or not to grant an application. Some statutes are explicit that the agency “shall” prefer higher uses over lower ones.¹⁸⁵ Some statutes that provide for a particular water-related use may also be establishing the priority level for that use. That certainly is what the federal and state endangered species acts have accomplished.¹⁸⁶ Similarly, federally and state recognized public rights to navigate get high priority because of the source of the right.¹⁸⁷ While there has been considerable debate over how that top priority ought to be integrated or not integrated into a state’s existing water allocation scheme where the priority originates outside that scheme,¹⁸⁸ there is no doubt as to its number one priority for water in any given state. Similarly, the protection accorded wetlands¹⁸⁹ is a mandatory use preference for all of the uses that are served by the existence of wetlands, which may vary from pollution control to wildlife habitat.

- a. Water conveyed across state boundaries.
- b. Uses of water primarily for recreational or aesthetic purposes.
- c. Uses of water for the irrigation of hay, corn, soybeans, oats, grain sorghum or wheat.
- d. Uses of water for the irrigation of crops other than hay, corn, soybeans, oats, grain sorghum or wheat.
- e. Uses of water for manufacturing or other industrial processes.
- f. Uses of water for generation of electric power for public consumption.
- g. Uses of water for livestock production.
- h. Uses of water for human consumption and sanitation supplied by rural water districts, municipal water systems, or other public water supplies
- i. Uses of water for human consumption and sanitation supplied by a private water supply

IOWA CODE ANN. § 455B.266(2) (West 1997).

183. See *infra* text accompanying notes 228-30.

184. See *supra* text accompanying note 178.

185. Thus, Arizona law provides that “preference shall be given by the director according to the relative values to the public of the proposed use.” ARIZ. REV. STAT. ANN. § 45-157(A) (West Supp. 2000). “The relative values to the public for the purposes of this section shall be: 1. Domestic and municipal uses 2. Irrigation and stock watering. 3. Power and mining uses. 4. Recreation and wildlife, including fish. 5. Nonrecoverable water storage pursuant to 45-833.01.” *Id.* § 45-157(B).

186. See *Tennessee Valley Auth. v. Hill*, 437 U.S. 153 (1978) (prohibiting completion of a dam to protect the snail darter); see also *Central Platte Nat. Res. Dist. v. City of Fremont*, 549 N.W.2d 112 (Neb. 1996); Kyra Epstein, *Columbia Dam Almost Demolished, Land Use up for Debate*, U.S. WATER NEWS, Dec. 1999, at 5, col. 1 (“[M]ussel derails \$85 million worth of construction [in Duck River, Tennessee.]”).

187. See *supra* text accompanying notes 74-81, 130-35.

188. See *supra* note 109.

189. See 5 WATERS AND WATER RIGHTS, *supra* note 6, § 61.03(c).

There may also be some state statutes that provide for absolute preferences.¹⁹⁰ The approach in Bakes' opinion¹⁹¹ to the Idaho constitutionally preferred uses appears to treat those preferred uses as entitled to an absolute preference over nonconstitutional uses. But would Bakes treat a future constitutional use such that it could displace an ongoing nonconstitutional use without payment of compensation?¹⁹²

Whereas many of the early statutes did not contain any language as to how they were to operate, many now do contain such language.¹⁹³ The North Dakota statutes¹⁹⁴ are instructive. The 1963 statute did not contain any specification as to how the preferred use list was to operate,¹⁹⁵ but in the 1977 revised statute, the legislature specified how it was to operate.¹⁹⁶

Another way in which the preferences may be considered in connection with an application is to measure the applied for use as against future uses. Thus the Utah Code provides:

If the state engineer . . . has reason to believe that an application to appropriate water will interfere with its more beneficial use for irrigation, domestic or culinary, stock watering, power or mining development or manufacturing, or will unreasonably affect public recreation or the natural stream environment, or will prove detrimental to the public welfare, it

190. See Stephen S. Gealy, Comment, *Protection Unlimited: A Preferred User's Right to Means of Groundwater Diversion in Nebraska*, 62 NEB. L. REV. 270, 289 (1983), which suggests that while Nebraska's preference system for surface water is based on condemnation, the groundwater preference statute appears to provide "a system of absolute preferences." The Nebraska groundwater preference statute, however, reads like the Colorado Constitution provision, quoted *supra* text accompanying note 136, which has been held limited to use of eminent domain. See NEB. REV. STAT. § 46-613 (1998).

191. See *supra* text accompanying note 34.

192. California's preference for domestic use in drought emergency does not require a water district to favor potential domestic users over existing nondomestic users. See *Building Indus. Ass'n v. Marin Mun. Water Dist.*, 1 Cal. Rptr. 2d 625 (Cal. Ct. App. 1991). A developer wanting to build 151 housing units to which the district's moratorium on new hookups applied had argued for the broader preference for domestic use. See *id.*; see also A. Dan Tarlock, *Western Water Law, Global Warming, and Growth Limitations*, 24 LOY. L.A. L. REV. 979, 999-1012 (1991); Dennis J. Herman, Note, *Sometimes There's Nothing Left to Give: The Justification for Denying Water Services to New Customers to Control Growth*, 44 STAN. L. REV. 429 (1992).

193. The "shall" prefer language has already been noted. See *supra* note 185; see also MINN. STAT. ANN. § 103G.261 (West 1997) ("The commissioner shall adopt rules for allocation of waters based on the following priorities for the consumptive appropriation and use of water . . ."). For application of the priorities without rules having been adopted, see *Crookston Cattle Co. v. Department of Natural Resources*, 300 N.W.2d 769 (Minn. 1980).

194. See statutes cited *supra* notes 150-51; see also KAN. STAT. ANN. § 82a-707 (1997); WYO. STAT. ANN. § 41-3-103 (Michie 1999).

195. See *supra* text accompanying note 150.

196. See *supra* text accompanying note 151; see also *infra* text accompanying note 228.

is his duty to withhold his approval or rejection until he has investigated¹⁹⁷

In *Tanner v. Bacon*,¹⁹⁸ the Utah Supreme Court upheld the rejection of plaintiff's application for the use of water for power purposes, in the face of a publicly sponsored irrigation project then only in the planning stage.¹⁹⁹

Although the language in the Colorado Constitution²⁰⁰ could have been interpreted as establishing a true preference so that whenever a conflict occurred between any two of the three listed uses, the person with the more preferred use would prevail, it was not so interpreted.²⁰¹ Such an interpretation would have meant in effect that any manufacturer who spent money to divert and use water did so under the condition that at any time (even a week later) someone else could come along and start an agricultural use that would trump the manufacturing use. Instead, the court held that the prior use had vested, and while indeed the more preferred use could trump the earlier less preferred use, it could be accomplished only with the payment of compensation to the less preferred use. While this would be a sound legal decision as to any use that antedated the constitutional provision, it did not appear to be a sound legal decision as to uses commenced after the provision became effective.²⁰² Instead the decisions seem to have been based on policy and not law. The problem with any interpretation other than the one the court gave to the provision was the uncertainty over whether anyone would ever invest money in manufacturing if such investors were under that type of risk of losing the water necessary for the enterprise, and thus losing the investment.²⁰³

One way that a conditioned water right might work is illustrated in *O'Neill v. United States*,²⁰⁴ involving water provided through a U.S. Bureau of Reclamation contract. In *O'Neill*, the customer was entitled to a specified quantity of water from the Bureau facility under a contract that had been entered into between the parties. The contract contained

197. UTAH CODE ANN. § 73-3-8(1) (1989); accord ALASKA STAT. § 46.15.090 (Michie 2000).

198. 136 P.2d 957 (Utah 1943).

199. See *Tanner v. Bacon*, 136 P.2d 957, 964 (Utah 1943). "That domestic use is the most beneficial use for water and that irrigation is the next most beneficial use in the arid western states is a self-evident and well recognized fact regardless of any statute." *Id.* at 963.

200. See *supra* text accompanying note 136.

201. Thomas, *supra* note 4, develops the interpretation history not only of the Colorado Constitutional provision, but also of the comparable Idaho and Nebraska constitutional provisions.

202. The subsequent uses would be taken subject to the condition that they must give way in the face of a preferred use.

203. "The higher the probability of divestment, the less likely owners would be to invest in irrigation works or other facilities which are necessary in order to use the water." Oeltjen & Fischer, *supra* note 4, at 263.

204. 50 F.3d 677 (9th Cir. 1995).

an exculpatory clause that provided in part that "in no event shall any liability accrue against the United States . . . for any damages . . . arising from a shortage on account of errors in operation, drought, or *any other causes*."²⁰⁵ Because of problems with winter-run chinook salmon and other species, Congress provided in legislation enacted in 1992²⁰⁶ that a specified amount of water was to be dedicated to species protection.²⁰⁷ The result was that the Bureau could only provide fifty percent of the water that the contracting party would otherwise have been entitled to receive.²⁰⁸ The *O'Neill* Court held that when legislation creates a shortage of water for contract purposes, it constitutes shortage from "any other cause" under the exculpatory clause, and the government is not liable.²⁰⁹

Previous writers who have written about preferred uses have relied principally on provisions in Texas and California law to illustrate the conditional approach.²¹⁰ The Texas statute provided that "an appropriation . . . for any purpose other than domestic or municipal use is subject to the right of any city or town to make further appropriations of the water for domestic or municipal use without paying for the water."²¹¹ Thus presumably, and according to the writers, any water right issued after this statute became law in 1931 was a conditional right, conditioned upon no city or town deciding to appropriate more water at a time when there was no unappropriated water left in the source. While this statute has been repealed,²¹² water rights are frequently obtained subject to some conditions.²¹³ For example, in *A & B Irrigation District v. Idaho Conservation League*,²¹⁴ the Idaho Supreme Court considered whether what in Idaho are termed "general provisions" should be imposed in the on-going general adjudication process. The court concluded that a

205. *O'Neill v. United States*, 50 F.3d 677, 683 (9th Cir. 1995) (emphasis added).

206. See Central Valley Project Improvement Act, Pub. L. No. 102-575, Tit. XXXIV, 106 Stat. 4706 (1992).

207. See *id.* § 3406, at 4714 ("Fish, wildlife and habitat restoration"); see also *O'Neill*, 50 F.3d at 681.

208. See *O'Neill*, 50 F.3d at 681.

209. See *id.* at 684.

210. See Trelease, *supra* note 1, at 134-37, 155; Gross, *supra* note 4, at 267-68; Oeltjen & Fischer, *supra* note 4, at 262-63.

211. TEX. WATER CODE ANN. § 11.028 (repealed 1997); see also Sherry Lynn Peel, *Acquisition of Municipal Water Rights in Texas: A Conceptual and Operational Analysis*, 17 TEX. TECH. L. REV. 811 (1986). However, apparently the statute was never so applied, and in 1997 it was repealed. See 1997 Tex. Sess. Law Serv. ch. 1010, § 9.01 (Vernon). The legislature instead adopted a system of emergency authorizations to deal with drought, but these may require payment of compensation. See TEX. WATER CODE ANN. § 11.139 (Vernon 2000).

212. See *supra* note 211.

213. See *City of Albuquerque v. Reynolds*, 379 P.2d 73, 81-82 (N.M. 1963); *East Bay Mun. Dist. v. Department of Pub. Works*, 35 P.2d 1027, 1029 (Cal. 1934).

214. 958 P.2d 568 (Idaho 1997).

general provision that provides that firefighting is an alternate use for water for which any water right may be used²¹⁵ was an appropriate general provision. Thus a general provision can be both enlarging and limiting.²¹⁶

The California statute provides that the State Water Resources Control Board is to issue water permits on "such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated."²¹⁷ *California v. United States*²¹⁸ is one of the landmark cases involving California's attachment of conditions to water permits. Here the Board had attached twenty-five conditions to permits given to the U.S. Bureau of Reclamation to fill the New Melones Dam. While many of the conditions are pre-conditions to the ability to exercise the water right, there are also conditions that apply after the water right has been exercised.²¹⁹ In *East Bay Municipal Utility District v. Department of Public Works*,²²⁰ the condition, which was upheld, provided: "The right to store and use water for power purposes under this permit shall not interfere with future appropriations of said water for agricultural or municipal purposes."²²¹

Many statutes specifically provide for the use of eminent domain in relation to the water resource. While many of the statutes appear to relate only to obtaining access to a water source and to rights of way for transporting water, some clearly relate to condemning water or water rights to be used for specified uses. Those uses are in that sense preferred uses. These powers may be identified in state constitutions,²²²

215.

- a. Firefighting purposes is an alternate use for which any water right may be used, and firefighting is recognized as a lawful use of water with or without a water right.
- b. Firefighting purposes means the use of water in times of emergency: to extinguish an existing fire on private or public lands, facilities, or equipment; to prevent an existing fire from spreading to private or public lands, facilities, or equipment within the vicinity of and endangered by an existing fire; and by firefighting personnel engaged in fighting an existing fire. Firefighting purposes does not include the use of water to prevent a fire from occurring in the future, the use of water for domestic purposes in regularly maintained firefighting stations, or the storage of water for fighting future fires.

A & B Irrigation Dist. v. Idaho Conservation League, 958 P.2d 568, 574 (Idaho 1997).

216. See *id.*

217. CALIF. WATER CODE § 1253 (West 1971); accord Trelease, *supra* note 1, at 136; Gross, *supra* note 4, at 268.

218. 438 U.S. 645 (1978).

219. See *California v. United States*, 438 U.S. 645, 652 n.8 (1978).

220. 35 P.2d 1027 (Cal. 1934).

221. *East Bay Mun. Util. Dist. v. Department of Pub. Works*, 35 P.2d 1027, 1027 (Cal. 1934).

222. See the discussion of the Colorado constitutional provision, *supra* text accompanying notes 200-03.

procedural statutes,²²³ municipal enabling legislation,²²⁴ and in the water laws.²²⁵

V. USE PREFERENCES IN THE FUTURE

This section considers both what use preferences should exist in the future and how they should be used in water resource allocation, although each aspect is not examined as a separate entity.

Summarizing the ways in which water use preferences have been applied in the past, we can identify four categories: (1) to discriminate among competing applications for water permits; (2) to reserve water for one or more preferred uses in the future; (3) to limit or encourage transfer of water use from lower to higher preferred use categories whether through voluntary transfer or through the use of eminent domain; and (4) to allocate water during drought or other water emergency.

Trelease pointed out in 1955: "Where water uses already approach the maximum level, establishing a system of preferences between future appropriations may accomplish little. The power to choose the more desirable of pending applications likewise may be of little effect unless applications for major projects happen to coincide."²²⁶ With full appropriation of most sources of water in much of the west, and the limited opportunity to generate new supplies, the focus for new water uses there has turned to reallocation.²²⁷

So if reallocation rather than initial allocation is to be the mode in some areas, the question becomes how do preferences play out in reallocation? Some state statutes specifically relate the preferred use provisions to reallocation. North Dakota, for example, provides: "A change in the purpose of use [of a water permit] may be authorized only for a superior use as determined by the order of priorities . . ." ²²⁸ The reference to "order of priorities" is apparently to North Dakota's

223. However it is questionable whether these statutes apply to more than allowing condemnation of rights of way to transport water. See, e.g., IDAHO CODE § 7-703 (Michie 1998); ARIZ. REV. STAT. ANN. § 12-1111 (West 1994). Although Arizona law provides specifically that a person's "use in the water of a stream, river or spring" can be condemned, such condemnation would appear limited to the purposes contained in § 12-1111. See ARIZ. REV. STAT. ANN. § 12-1113 (West 1994).

224. See, e.g., COLO. REV. STAT. § 38-6-201 (2000) (condemnation of water rights by municipalities); UTAH CODE ANN. § 10-7-4 (municipal acquisition of water supply). For a discussion of eminent domain for municipalities in riparian jurisdictions, see 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.04(b).

225. See, e.g., KAN. STAT. ANN. § 82a-707 (1997); WYO. STAT. ANN. § 41-3-103 (Michie 1999). Often this right is limited to acquiring rights of way for transporting water rather than the water itself. See, e.g., UTAH CODE ANN. § 73-1-6 (1989).

226. Trelease, *supra* note 1, at 160.

227. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 14.01(b)(1).

228. N.D. CENT. CODE § 61-04-15.1(3) (1995).

preferred use list,²²⁹ because that list is an "order of priority."²³⁰ Under this provision, the question noted earlier,²³¹ whether North Dakota courts would categorize the use of water to raise food for waterfowl as "4" in the list, "irrigation use," as the South Dakota Supreme Court did,²³² or as "6," "fish, wildlife, and other outdoor recreation uses" becomes important.

Oeltjen and Fischer point out that "Most of the current restrictions on water rights, as well as the various use preferences, impede the movement of rights to water toward their highest and best uses."²³³ They are not speaking of a highest use established in a statutory list but rather a highest use established through the market.²³⁴ Experience shows that the significant movement of water rights in the western United States to date has been from irrigation use to serving municipal needs (domestic, commercial, and some industrial) and to serving environmental and ecological needs.²³⁵ The preference for irrigation use specified under federal projects legislation has impeded this movement.²³⁶ While there has been some change in federal preference policy,²³⁷ it is by no means fully accomplished.

While generally the eastern riparian doctrine states have been considered water rich when compared with the western prior appropriation doctrine states, eighteen of the eastern riparian states have enacted permit systems apparently because of disruption from droughts and perhaps a perception that water is fully or at least heavily used even without droughts.²³⁸ However, in other areas of the east, water allocation works

229. See *supra* text accompanying note 151.

230. *Id.*; see also *supra* note 158.

231. See *supra* text accompanying note 175.

232. See *supra* text accompanying notes 168-73.

233. Oeltjen & Fischer, *supra* note 4, at 281.

Because of the inflexibility inherent in preference systems, and especially those which are established by constitution or statute, these provisions will likely become significant obstacles to the rational use of water. At best these schemes reflect values which are not likely to continue to represent the most beneficial use of water resources under changing conditions.

Oeltjen & Fischer, *supra* note 4, at 260.

234. See Oeltjen & Fischer, *supra* note 4, at 269-81. Not everyone agrees that markets can work to any great extent in the water resource allocation arena. See, e.g., 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.04. Furthermore, it is unrealistic to expect much for it.

235. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 14.01(b)(1), at 4-5.

236. See *id.*; see also 4 WATERS AND WATER RIGHTS, *supra* note 16, § 41.06(a) (Supp. 2000).

237. See United States Department of the Interior, *Assessment '87*, 4 WATERS AND WATER RIGHTS, *supra* note 16, app. 41B (Supp. 2000). In the Central Valley Project Improvement Act, Pub. L. No. 102-575, Tit. XXXIV, 106 Stat. 4706 (1992), Congress provided that water can be transferred for any purpose "recognized as beneficial under applicable State law." *Id.* § 3405, 106 Stat. at 4710.

238. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03. Consider simply the ongoing controversy over certain rivers among Alabama, Florida, and Georgia. See 6 WATERS AND WATER RIGHTS 5, 8-16, 55, 59-60 (Robert E. Beck ed., 1994 & Supp. 2000).

essentially under the common law.²³⁹ In a few of the permit states, the permit system may not extend to the entire state, but may deal only with selected areas where significant problems are perceived to exist denominated, for example, critical areas.²⁴⁰ However, at times acquiring water supplies for municipalities in the eastern United States has been as difficult as doing so in the west.²⁴¹

Dean Trelease wrote of the eminent domain statutes in 1955: "Little used to date, these statutes may provide a future method of readjusting water uses when maximum development has been reached, if the pattern of that development is not making the maximum contribution to the public welfare."²⁴² In 1965 Gross put the future of condemnation more positively and emphatically than Trelease did:

The statutory preference, as old as the system of prior appropriation and yet relatively untested as a vehicle of avoiding vested rights, appears to be the coming means for readjusting water uses when demanded by the changing times and circumstances. As the definition of "public use" slowly changes to encompass the use of water by an individual for an individual, the implementation of such preferences by condemnation proceedings will become a common occurrence, and the protection presently granted prior rights and uses will be replaced by an adjudication as to which of the conflicting uses is "most necessary" in light of present circumstances and the legislative intention. In this way will the prior appropriation system deteriorate as an effective water rights system, the victim of an inflexibility similar to that of which the riparian doctrine was cured by Justice Story over 150 years ago.²⁴³

However Gross considers condemnation a "post-malady relief" and prefers "preventative cures" such as awarding only conditional water rights and setting water aside for anticipated future uses.²⁴⁴ The principal question about the utility of condemnation is its availability to an individual for personal use. Professor Gross discusses this issue at length and notes that several jurisdictions, even in the western United States, have rejected the use of eminent domain by private individuals.²⁴⁵ However private individuals in some western United States have been allowed to

239. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03.

240. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03(a)(5)(A).

241. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 7.05(c).

242. Trelease, *supra* note 1, at 138.

243. Gross, *supra* note 4, at 283.

244. See Gross, *supra* note 4, at 270. *But see supra* text accompanying note 226.

245. See Gross, *supra* note 4, at 272-76.

condemn access to water and rights of way for transporting water,²⁴⁶ but would those courts extend that to condemning the water or water right itself?²⁴⁷ Thus, even if the statutes were broad enough to encompass both,²⁴⁸ a real question about what the courts would do exists.

Furthermore there are limits on transferability whatever the mode; in particular, the perceived need for area of origin protection, designed to assure that water source areas are not left to wither on the vine.²⁴⁹

The Oeltjen and Fischer observation about impeding the market²⁵⁰ raises the question of what, if any, use preferences should exist in the future. In considering the future of water use law and regulation in the eastern United States, Professor Abrams²⁵¹ rejects both importing prior appropriation doctrine from the west and continuing the current statutory regulation that exists in the east. The latter he criticizes for “[1] its rigidity, [2] its tendency to overregulate, and [3] its lack of articulated policy objectives.”²⁵² The rigidity objection focuses on the permit being user specific and not transferable separate from the land benefitted by the use.²⁵³ The overregulation objection focuses on users who are not a part of the allocation problem that led to the enactment of the statutes being forced to participate in the regulation.²⁵⁴ The lack of articulated policy objection focuses on lack of guidance in the legislation, resulting in the administrative agency in charge of making water allocation decisions doing so on an *ad hoc* basis rather than in the context of integrated water system management.²⁵⁵ The solution Abrams proposes is “giving legal protection to the most important uses of the water,”²⁵⁶ resulting in a hierarchical preference based permit system.

Abrams puts as his most important use supporting concentrated human populations and, therefore, would give that a preference over all other uses.²⁵⁷ He notes that although domestic use requires substantial

246. See Gross, *supra* note 4, at 274.

247. Although seeking to ascertain Texas law on the subject, the article by Professor Johnson is a comprehensive and excellent general treatment of the subject. See Corwin W. Johnson, *Condemnation of Water Rights*, 46 TEX. L. REV. 1054 (1968).

248. And many are not. See generally Gross, *supra* note 4; statutes cited *supra* notes 223, 225.

249. See 2 WATERS AND WATER RIGHTS, *supra* note 3, § 14.04(d)(2).

250. See *supra* text accompanying note 233.

251. Robert H. Abrams, *Replacing Riparianism in the Twenty-First Century*, 36 WAYNE L. REV. 93 (1989).

252. *Id.* at 98.

253. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 9.03(d).

254. Regulation, but through a designation of critical areas approach, addresses this criticism.

255. See Abrams, *supra* note 251, at 98.

256. Abrams, *supra* note 251, at 98.

257. See Abrams, *supra* note 251, at 99. Essentially Dean Trelease agreed: “[O]bviously the uses that are directly necessary to human life and health come first.” Trelease, *supra* note 1, at 159. Oeltjen and Fischer, however, appear to take a different focus noting only that “[A] good case can be made for absolute preference for individual domestic uses.” Oeltjen & Fischer, *supra* note 4, at 264.

withdrawals from water sources, particularly for sewage disposal, very little of that withdrawn water is consumed. To accomplish this top use priority, he finds one essential element to be storing water both for periods of shortfall and to meet increasing demand from the growth of the community. As for storage above ground, Abrams finds sufficient security for municipal supplies,²⁵⁸ but the same does not exist, he says, for underground storage.²⁵⁹ Because many eastern states have statutes providing for underground storage of gas,²⁶⁰ such statutes may well serve as a model for statutes providing for underground storage of water. Abram's choice for second most important use is instream flow protection, which he identifies as even less of a consumptive use than municipal needs.²⁶¹ However, the notion of consumptive use is a meaningful concept only in the context that it prevents the water from being used or reused, so to the extent that maintaining instream flows requires that amount of water to flow to the ocean,²⁶² it is consumptive in the sense that it cannot be used for any other use. But Abrams recognizes that maintaining instream flow does not fit into a permit system approach with the same facility as uses that have specific sponsors. "[H]ow protection can be coordinated with the preference system is the first order of business in ensuring that instream flow protection does not compromise the sewage and drinking water needs of concentrated populations."²⁶³

The Regulated Riparian Model Water Code (Code)²⁶⁴ appears to solve this problem by making minimum instream flow and lake level protection in effect the top preference so that permits for withdrawal of water from the source can be issued only as long as the minimum flow or level is maintained,²⁶⁵ but then subject to some exception in water

They conclude that alternative allocation systems would not protect such users; individuals generally do not have the power of eminent domain, and under a market scheme, "a small farmer or non-farm rural resident—may not have the financial means to purchase water rights from a senior owner." Oeltjen & Fischer, *supra* note 4, at 264.

258. See Abrams, *supra* note 251, at 103.

259. See *id.* at 103. Western states are already dealing directly with underground storage of water. See 1 WATERS AND WATER RIGHTS, *supra* note 2, § 3.02 n.32 and accompanying text.

260. See, e.g., 220 ILL. COMP. STAT. ANN. 15/1 (West 2000).

261. Dean Trelease, writing in 1955, put as second: "uses for irrigation and industrial consumption, where there is no substitute for water." Trelease, *supra* note 1, at 159. He noted that in some areas tourism and hunting had become important commercial enterprises implicating protecting recreational, fish and wildlife values. Trelease, *supra* note 1, at 159. Although he referred to the recent recognition of the need to maintain stream flow, he put that only in the context of being "adequate to dilute municipal and industrial wastes and prevent downstream health problems." Trelease, *supra* note 1, at 159.

262. See Trelease, *supra* note 1, text accompanying note 143.

263. Abrams, *supra* note 251, at 102.

264. WATER LAWS COMMITTEE, A MERICAN SOCIETY OF CIVIL ENGINEERS, THE REGULATED RIPARIAN MODEL WATER CODE (1997) [hereinafter RRMWC]. This Model Code contains commentary on each provision as well as cross-references to related provisions in the Code and citation to comparable provisions in existing statutes.

265. *Id.* § 6R-3-04(2) provides that allocations can be made "up to the safe yield or other applicable limit." As to other applicable limits, see *infra* text accompanying notes 272-73. Safe yield

emergencies.²⁶⁶ The Code provides that the state agency is to establish the minimum flow or level of any source and that established level will not be subject to allocation except as provided in that part of the Code.²⁶⁷ In setting the minimum flow or level, the agency is to set the flow or level at the amount required for maintaining the biological, chemical, and physical integrity of the source "taking into account normal seasonal variations in flow and need."²⁶⁸ Persons exercising water rights under the Code are required to protect the minimum flows or levels.²⁶⁹ The authors of the Code envision this protection being accomplished through provisions and conditions contained in any permit that is granted under the Code.²⁷⁰ However, whenever there are threats to the minimum flows or levels, the agency can declare either a water shortage or a water emergency.²⁷¹ During a water emergency, the agency has authority to allocate water from the minimum flows or levels "when necessary to prevent serious injuries to water uses established before the beginning of the water emergency" but then only to the extent that the allocation will not cause permanent impairment of any of the integrities.²⁷² The Code anticipates preplanning for emergencies by requiring the agency to set emergency minimum flows or levels that cannot be invaded "except to prevent grave threats to human life or health . . . where water is not available from other sources for coping with these needs."²⁷³ Thus Abram's preference for human use comes to the fore in the Code but only in the limiting context of this emergency provision.

The next issue for Abrams is the creation of additional priorities, the issue of adding uses after the first round of uses have been determined, the issue to what extent permits should be transferable and then transferable to other priority level uses, and the issue of priority within each use level. Abrams also explores the question of ascertaining the quantity of water for which a preference permit would be issued.²⁷⁴ He notes the

is defined as "the amount of water available for withdrawal without impairing the long-term social utility of the water source, including the maintenance of the protected biological, chemical, and physical integrity of the source." *Id.* § 2R-2-21. Biological, chemical, and physical integrity are in turn defined. *See id.* §§ 2R-2-02, 2R-2-03, 2R-2-16. This is like the Arkansas approach discussed *supra* text accompanying notes 145-49.

266. *See infra* text accompanying notes 272-73.

267. *See* RRMWC, *supra* note 264, § 3R-2-01(1).

268. RRMWC, *supra* note 264, § 3R-2-02. *See supra* note 265 for citations to the definitions of the integrities.

269. *See* RRMWC, *supra* note 264, § 3R-2-01(2).

270. *See* RRMWC, *supra* note 264, at 82-3.

271. *See* RRMWC, *supra* note 264, § 3R-2-03(1); *see also* RRMWC, *supra* note 264, § 2R-2-31 (defining water shortage); RRMWC, *supra* note 264, § 2R-2-29 (defining water emergency).

272. RRMWC, *supra* note 264, § 3R-2-03(2).

273. RRMWC, *supra* note 264, § 3R-2-03(3).

274. This is important for the Model Code too, to make sure minimum flows and levels are not ignored. This is easier to accomplish if permitted use quantities do not exceed normal flows, but this is hard to do and with the possible exception of Texas, never done under prior appropriation. Abrams also suggests the codification of the common law doctrines which would include a recognition of

experience in quantifying under the prior appropriation system and the federal reserved rights system and that the same scarcity and competition issues that are behind those systems are important to those eastern states that are moving away from common law riparianism.

The Code establishes an overall goal of allocating water among users "in a sustainable manner."²⁷⁵ As a part of carrying out that goal, it establishes preferences for withdrawals up to a safe yield.²⁷⁶ Safe yield is defined as the minimum level necessary to maintain the "long-term social utility of the water source, including . . . [maintaining protected biological, chemical, and physical integrity of the source]."²⁷⁷ The Code establishes three basic categories of preference: (1) "direct human consumption or sanitation necessary for human survival and health;"²⁷⁸ (2) "uses necessary for the survival or health of livestock and to preserve crops or physical plant and equipment from physical damage or loss . . ." depending on the water source;²⁷⁹ and (3) other uses to maximize employment and economic benefits²⁸⁰ "within the overall goal of sustainable development as set forth in the comprehensive water plan."²⁸¹ In noting that many statutes are more definitive in particularizing preferred uses such as for agriculture or industry, the authors and editors of the Code observe that those choices "generally reflect political clout rather than rational water management and are often not enforced in practice anyway."²⁸² The Code does provide that within a use preference category, uses that maximize the reasonable use of water are to be preferred.²⁸³ This according to the commentary should be worked out in the state's comprehensive plan.²⁸⁴

superior ownership rights to imported water in the importer. See *Abrams*, *supra* note 251, at 104-05.

275. See RRMWC, *supra* note 264, § 1R-1-02. The Code defines sustainable development as "the integrated management of resources taking seriously the needs of future generations as well as the current generation, assuring equitable access to resources, optimizing the use of non-renewable resources, and averting the exhaustion of renewable resources." RRMWC, *supra* note 264, § 2R-2-24.

276. See RRMWC, *supra* note 264, § 6R-3-04(1); see also *supra* note 265.

277. See RRMWC, *supra* note 264, § 2R-2-21(1).

278. See RRMWC, *supra* note 264, § 6R-3-04(1). The Code in effect simply turns around *Abram's* number 1 and 2 propositions. These, when viewed from a single family riparian owner perspective, were within the historic domestic or natural use category but here come with the expansion to all riparian and nonriparians alike.

279. See RRMWC, *supra* note 264, § 6R-3-04(1). Some of these, to the extent represented by use on riparian lands, were within the historic domestic or natural use preference, but are considerably expanded to include larger livestock enterprises and to covering physical plants and equipment.

280. See RRMWC, *supra* note 264, § 6R-3-04(1). Here is a historic purported purpose of the adoption of prior appropriation doctrine in the west in the first place.

281. RRMWC, *supra* note 264, § 6R-3-04(1).

282. RRMWC, *supra* note 264, at 247.

283. See RRMWC, *supra* note 264, § 6R-3-04(3).

284. See *id.* at 248. The Code section on comprehensive planning provides that "the State will develop a comprehensive water allocation plan and devise appropriate conservation and drought management strategies to serve the public interest in the waters of the State through establishing and maintaining sustainable development of the waters of the State." See RRMWC, *supra* note 264,

With the overwhelming movement²⁸⁵ toward environmental and ecosystem protection at the state level,²⁸⁶ particularly through the establishment of minimum stream flows and lake levels,²⁸⁷ and with the historic position for domestic use of number one in preferred use lists, it would seem that the Code contains the best approach for the future. It provides a workable scheme for interrelating the two. Even though the approach appears in a Regulated Riparian code there is no significant reason why it would not be adaptable to prior appropriation doctrine states.²⁸⁸ Furthermore, and certainly to the extent of the interconnection between surface water and groundwater, these principles would also govern groundwater. The public trust doctrine and the federal statutes enacted in the 1960s support the notion of preferring ecosystem protection. The universal provision for the availability of eminent domain to acquire municipal water supplies supports the preferred status of domestic use. With the preferences for ecosystem protection and domestic use, it is doubtful that further preferences are necessary except in the context of drought or other water emergencies. There use preferences should continue to be specified and probably in considerable detail so that the public will understand ahead of time what will happen with water use during a drought.

§ 1R-1-04. See *supra* note 275 for the Code definition of sustainable development.

285. "Movement" is a fair description, as the process of establishing a top priority for ecosystem maintenance and protection is not accomplished. Consider for example the status of instream flows under Nebraska law. See NEB. REV. STAT. §§ 46-2,107 to -2,119 (1998) (instream appropriations).

286. See generally Lynda L. Butler, *Environmental Water Rights: An Evolving Concept of Public Property*, 9 VA. ENVTL. L.J. 323 (1990).

287. See generally 2 WATERS AND WATER RIGHTS, *supra* note 3, §§ 13.05(a), 15.03(c)(4)(C); 1 WATERS AND WATER RIGHTS, *supra* note 2, §§ 7.05, 9.05(b).

288. For approaches to minimum stream flow and lake level protection in the western United States, see INSTREAM FLOW PROTECTION IN THE WEST (L. MacDonnell & T. Rice eds., 2d ed. 1993).