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BENEFICIAL USE IN OKLAHOMA WATER LAW: OPPORTUNITY FOR BETTER MANAGEMENT OR MORE MISCHIEF?

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Before the Oklahoma Water Resources Board takes final action on an application for a permit to use water, the Board must determine, from the evidence presented, whether the intended use is a beneficial use.¹ This essential element that must be shown to obtain a water use permit is found in separate Oklahoma statutes that govern use of water from a definite stream² and the use of groundwater.³ Because this beneficial use requirement is critical to all use of water in Oklahoma, an analysis of the meaning of “beneficial use” is timely, particularly in light of recommendations made in the 2012 Update to the Oklahoma Comprehensive Water Plan⁴ that could lead to modifications in Oklahoma’s water use policies or laws.

Background of Beneficial Use in Appropriation Law

The concept of “beneficial use” as part of water law doctrine can be traced to a California Supreme Court case that defined appropriation as “the intent to take, accompanied by some open physical demonstration of the

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1. 82 OKLA. STAT. §§ 105.12(A)(2), 1020.9(A)(1)(b) (2011)

2. *Id.* § 105.1(1) (defining “definite stream” as a “water course in a definite, natural channel, with defined beds and banks, originating from a definite source or sources of supply”).

3. *Id.* § 1020.1(1) (defining “groundwater” as “fresh water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream”). In 1890, the Oklahoma Territorial Legislature declared as a matter of property law that “[t]he owner of the land owns water standing thereon, or flowing under or over its surface, but not forming a definite stream.” TERR. OKLA. SESS. § 4162 (1890) (now codified at 60 OKLA. STAT. § 60).

4. The Oklahoma Water Resources Board (OWRB) is required to prepare decennial updates of the Oklahoma Comprehensive Water Plan pursuant to title 82, section 1086.2 of the Oklahoma Statutes. OKLA. WATER RES. BD., OKLAHOMA COMPREHENSIVE WATER PLAN EXECUTIVE REPORT (Feb. 2012) [hereinafter OWRB EXECUTIVE REPORT], available at http://www.owrb.ok.gov/supply/ocwp/pdf_ocwp/WaterPlanUpdate/draftreports/OCWP%20Executive%20Rpt%20FINAL.pdf.

intent, and for some valuable use.”⁵ The California Supreme Court decided this case about five years after the seminal appropriation law case of *Irwin v. Phillips*, wherein the California Supreme Court declared that the law of priority relied on to settle disputes as to mining claims, where “first in time gives the better right”, would be used to resolve disputes about use of water for such mining.⁶ The early appropriation law addressed conflicts among water users who did not own the land because California gold mining was taking place on public lands of the United States. The appropriation doctrine is distinguished from the riparian water rights doctrine and law that applies to use of water by owners whose land is riparian or borders a stream.

The term “valuable use” referenced as part of the definition of appropriation by the California court in 1859⁷ evolved to “beneficial purposes” in an 1886 Wyoming law as a label for acceptable use for which appropriation and adjudication of a water right may be made.⁸

In Oklahoma, the first territorial law on appropriation of water stated that irrigation is “beneficial” for agriculture purposes.⁹ This territorial appropriation law then provided a limited, exclusive list of purposes for which water could be appropriated by stating that the “appropriation of water must be either for irrigation, mining, milling, construction of waterworks for cities and towns, or stock raising.”¹⁰ In 1905, the Oklahoma Territorial Legislature expanded the appropriation law and for the first time included the phrase “beneficial use” in the following provision: “Beneficial use shall be the basis, the measure and the limit of the right to the use of water”¹¹ This statement of the second foundational element of the

5. *McDonald v. Bear River & Auburn Water & Mining Co.*, 13 Cal. 220, 222-23 (1859). An appropriation right is limited to the amount actually put to use, not the amount claimed before use begins, and the concept of beneficial use had its roots in the Mormon irrigation practice in Utah and conditioning the privilege of property ownership to productive, non-speculative use. See A. DAN TARLOCK, *LAW OF WATER RIGHTS AND RESOURCES* § 5:66 (2011).

6. 5 Cal. 140, 147 (1855). The court recognized that the miners involved in the dispute did not own the ‘public lands’ where the water flowed and therefore the riparian doctrine could not apply.

7. *McDonald*, 13 Cal. at 233.

8. CRAIG O. COOPER, *A HISTORY OF WATER LAW, WATER RIGHTS & WATER DEVELOPMENT IN WYOMING 1868-2002*, at 13 (2004), available at http://wwdc.state.wy.us/history/Wyoming_Water_Law_History.pdf.

9. 1897 Okla. Terr. Sess. Laws ch. XIX, art. 1, §§ 1, 4

10. 1897 Okla. Terr. Sess. Law 188.

11. 1905 Okla. Terr. Sess. Law 275.

appropriation doctrine (first in time, first in right is the other foundational element) is found in Oklahoma's current appropriation law¹² and in the appropriation laws of other western states.¹³ This statement is described as providing two focal points: first, that the water is put to a beneficial use contrasted with a non-beneficial use and, second, that only that amount of water that is put to beneficial use can be considered appropriated for which the usufructory right is recognized.¹⁴

Separate from Oklahoma statutes, the Oklahoma Supreme Court at the time of statehood described "beneficial use," along with priority in time, as fundamental elements to establish a right to appropriate water. The Court recognized the common law of appropriation by stating:

[I]n order to acquire a vested right in the use of water for such purposes—from the public streams, three things must concur: There must be the construction of ditches or channels for carrying the water; the water must be diverted into the artificial channels, and carried through them to the place to be used; and it must be actually applied to beneficial uses, and he has the best right who is first in time.¹⁵

The appropriation doctrine with its two foundational principles, that priority in time gives the better right and that beneficial use is the basis, the measure, and the limit of the right to the use of water, remains the principal statutory doctrine in Oklahoma for the regulation of use of water in a definite stream.¹⁶ It should be noted that the Oklahoma appropriation

12. 82 OKLA. STAT. §105.2(A) (2011). Immediately following the statement of the second foundational element for appropriation, the statute provides that water taken for domestic use shall not be subject to the provisions of the appropriation act with stated exceptions and that any person may take water from a stream to which he is riparian. By including the domestic use exemption language within the foundational statement of beneficial use, perhaps the Legislature intended to characterize all domestic uses as beneficial use. Riparian use, however, is typically governed by "reasonableness" as explained in *Franco-American Charolaise, Ltd. v. Oklahoma Water Resources Board*, 855 P.2d 568 (Okla. 1990).

13. *E.g.*, ARIZ. REV. STAT. ANN. § 45-141(B) (2003); NEV. REV. STAT. § 533.035 (West 2000); N.M. STAT. ANN. § 72-1-2 (West 2003); S.D. CODIFIED LAWS § 46-1-8 (2004); UTAH CODE ANN. § 73-1-3 (West 2004); WYO. STAT. ANN. § 41-3-101 (2011).

14. 2 WATERS AND WATER RIGHTS § 12.02(c)(2) (Robert E. Beck ed., 1991).

15. *Gates v. Settlers' Milling Canal & Reservoir Co.*, 91 P. 856, 858 (Okla. 1907).

16. 82 OKLA. STAT. § 105.2(A), (B). *But see Franco-American Charolaise*, 855 P.2d 568 (holding that riparian rights to reasonable use, in addition to limited domestic use riparian rights, still exist despite 1963 legislation establishing the appropriation doctrine as predominant). The effect of title 82, section 105.1A of the Oklahoma Statutes, which

statutes do not contain a definition of “beneficial use” and no longer contain a list of uses for which water may be used.¹⁷

Instead of “beneficial use,” the riparian doctrine utilizes the phrase “reasonable use,” and the concept of reasonable use is dealt with distinctly and separately from “beneficial use” by the courts, legislatures, and administrative agencies.¹⁸ The prior appropriation doctrine allows the water user, who may not own land riparian to a stream, to acquire a right to the beneficial use of water. The right to use is referred to as a usufructuary right, while the water itself remains *res communes* or *res nullius*.¹⁹ Because stream water is considered public water, owned by no one but belonging to all, stream water must be used beneficially in keeping with the public’s interest.

The requirement to show that a beneficial use is intended initially to establish an appropriation right, followed by the requirement that the water be applied continuously to the beneficial use as part of statutory appropriation law or the common law of appropriation, developed from the anti-speculation doctrine of western water law.²⁰ Measures to prevent speculating, or acquiring and holding resources for later sale, were understood to be necessary in the developing West where concentrated power was distrusted and locking up rights to water that is essential to human survival and economic activity was viewed as a mortal sin.²¹ Requirements to divert water, construct works to place the water to use, and actual use of water prevent persons from merely obtaining a paper right to block other potential appropriators that have more definite and financial support from initiating plans for actual use of the water.

reaffirmed that only limited domestic use rights exist and that riparian rights to future use are extinguished, remains undecided, though the statute was enacted soon after release of the *Franco-American Charolaise* opinion.

17. See *infra* note 80 and accompanying text.

18. Scott Andrew Shepard, *The Unbearable Cost of Skipping the Check: Property Rights, Takings Compensation & Ecological Protection in the Western Water Law Context*, 17 N.Y.U. ENVTL. L.J. 1063, 1065 (2009); Frank E. Maloney, Lynne C. Capehart & Robert S. Hoofman, *Florida’s “Reasonable Beneficial” Water Use Standard: Have East and West Met?*, 31 U. FLA. L. REV. 253, 269, 272-73 (1979).

19. Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892); Nat’l Audubon Soc’y v. Superior Court, 658 P.2d 709 (Cal. 1983); 1 W. HUTCHINS, WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES 442-45 (1971); Christopher H. Meyer, *Western Water and Wildlife: The New Frontier* 39 (Mar. 1990); Institutes of Justinian 2.1.1 (A.D. 529).

20. Janet C. Neuman, *Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use*, 28 ENVTL. LAW 919, 922, 923, 925 (1998).

21. Sandra Zellner, *The Anti-Speculation Doctrine and Its Implication for Collaborative Water Management*, NEV. L.J. 994, 997-98 (2008).

Beneficial use means more than just the application of stream water to a purpose that produces benefits (the basis). The amount used (the measure) and the manner and method of use (the limit) must be examined.²² Historically, the amount of water that could be appropriated for beneficial use was set by water “duties” based on the amount of water generally required by local custom for the proposed use, up to the amount that was available for appropriation. Water duty “is that measure of water, which, by careful management and use, without wastage, is reasonably required to be applied to any given tract of land for such a period of time as may be adequate to produce therefrom a maximum amount of such crops as ordinarily are grown thereon. It is not a hard and fast unit of measurement, but is variable according to conditions.”²³

Beneficial use, being “the basis, the measure and the limit of the right to the use of water” by Oklahoma appropriation law, contemplates a variety of reviews before an appropriation permit is issued and specific actions taken to put water to use after a permit is issued. The components of the beneficial use element of Oklahoma’s appropriation law are found in several sections of the law governing use of water running in a definite stream. At the initial stage, the law requires the filing of a permit application by providing that [a]ny person . . . intending to acquire the right to the beneficial use of any water shall . . . make application to the Board . . . for a permit to appropriate . . .”²⁴ Before issuing a permit, the Board must then determine whether the use to which the applicant intends to put the water is a beneficial use.²⁵ After an appropriation permit is

22. 2 ROBERT E. BECK, *WATERS AND WATER RIGHTS* § 12.03(c)(2) (2000).

23. *United States v. Alpine Land & Reservoir Co.*, 697 F.2d 851, 854 (9th Cir. 1983) (citing *Farmers Highline Canal & Reservoir Co. v. City of Colden*, 272 P.2d 629, 634 (Colo. 1954)); *see also In re Steffens*, 756 P.2d 1002, 1005-06 (Colo. 1988); *State Dep’t. of Ecology v. Grimes*, 852 P.2d 1044 (Wash. 1993).

24. 82 OKLA. STAT. § 105.9 (2011). The word “intending” in this provision implicates the issue of intent, but the OWRB presumes intent to acquire a right by use of the water. This section of law goes on to explain that the application to appropriate must be in the form required by the rules of the Board, with such rules to require each application to state all the data necessary for the proper description and limitation of the right applied for, as to the amount of water requested, together with such information as may be necessary to show the method and practicability of the construction and the ability of the applicant to complete the same. Clearly, this statute requires more of the applicant than to provide only the purpose of use from a list, such as “irrigation,” “municipal,” “industrial,” etc.

25. *Id.* § 105.12(A)(2). A use that may not be considered “beneficial” in Oklahoma, even at the application stage, is described in title 27, section 7.6, which provides that no Oklahoma water from any source shall be used in connection with a coal slurry pipeline in or through Oklahoma.

issued,²⁶ the statutes extend the anti-speculation and beneficial use principles by requiring commencement of works to place the water to beneficial use within two years after issuance of the permit, unless an extension is granted.²⁷ Additional after-the-fact (after permit issuance) anti-speculation provisions in Oklahoma's appropriation law include the requirement for the permittee to give notice of completion of works, Board inspection of such works "to determine the actual capacity of the works, their safety and efficiency,"²⁸ and the issuance of a certificate of completion "setting forth the actual capacity of the works and such limitations upon the water right as shall be warranted by the condition of the works"²⁹

The most significant after-the-fact regulatory mechanism and provision requiring ongoing beneficial use includes the forfeiture sections of Oklahoma's appropriation statutes. This statutory forfeiture law, which takes the place of common law abandonment (which requires a showing of intent to abandon),³⁰ provides that a regular permit shall require use of the full amount authorized within seven years after issuance of the permit unless a schedule of use is approved by the Board.³¹ Thereafter, "[t]o the extent that the water authorized is not put to beneficial use as provided by the terms of the permit", i.e., by the end of the initial seven-year period or according to the approved schedule of use, "the amount not so used shall be forfeited" and that amount again becomes public water³² and available for appropriation.³³ After the permit holder commences use of the water "but

26. At this post-permit issuance stage, the water right is considered inchoate, not vested, and subject to additional terms, conditions and requirements that must be met before the right can become vested.

27. 82 OKLA. STAT. § 105.15 (2011).

28. *Id.* § 105.25. The requirement to determine efficiency of works as part of a completion of works inspection supports the principle that efficient water use is a significant component of beneficial use.

29. *Id.* § 105.26.

30. Joseph F. Rarick, *Oklahoma Water Law, Stream and Surface, the Water Conservation Storage Commission and the 1965 and 1967 Amendments*, 24 OKLA. L. REV. 1, 6-12 (1971).

31. 82 OKLA. STAT. § 105.16.

32. *See* 60 OKLA. STAT. § 60 (2011). This property law section, after providing that the owner of the land owns the underlying groundwater and that groundwater is governed by the Oklahoma Groundwater Law, specifies that water running in a definite stream may be used by the riparian landowner for domestic use but may not prevent the natural flow of the stream or spring from which it commences, as such water becomes "public water" and is subject to appropriation.

33. 82 OKLA. STAT. § 105.17(A). Beneficial use of the full annual amount authorized during any one year of the initial seven-year period or beneficial use of the scheduled

thereafter fails to beneficially use all or any part of the water . . . for which a right of use has been vested for the purpose for which it was appropriated for a period of seven (7) continuous years, such unused water shall be regarded as unappropriated public water.”³⁴

Background of Beneficial Use in Oklahoma Groundwater Law

The first Oklahoma statutes to regulate use of groundwater replaced the court-recognized American rule of reasonable use and followed the appropriation doctrine by declaring that priority of claim shall be determined by priority in time.³⁵ The Legislature included a declaration of policy section in this 1949 groundwater act that included three components.³⁶ First, the Legislature declared it to be in the public policy of the State “to conserve and protect the groundwater resources of the State.” Second, for the purpose of conserving and protecting the groundwater resources, the declared public policy was “to provide reasonable regulations for the taking and use of groundwater.” Third, the declaration of policy to conserve and protect groundwater resources was “in the interest of the agricultural stability, domestic, municipal, industrial and other beneficial uses, general economy, health and welfare of the State and its citizens”.

This last described component of the declaration of public policy for the 1949 groundwater act contains a non-exclusive list of reasons for the policy to conserve and protect groundwater resources, which list of reasons includes a non-exclusive list of beneficial uses, i.e. “agricultural stability, domestic, municipal, industrial and other beneficial uses”. The 1949 Oklahoma Groundwater Law also used the phrase “beneficial use” in describing four actions that constituted “waste,” one of which was “[t]aking and using groundwater in any manner so that the water is lost for beneficial

incremental annual amount during any one year in the first increment of a schedule of use, “vests” the amount used so the right to that amount is no longer inchoate.

34. *Id.* § 105.17(B). Subsection (B) requires beneficial use of the full amount that has become vested, as a result of first use addressed by subsection (A), at least once every seven years, and the vested amount forfeited is lost regardless whether the Oklahoma Water Resources Board provides notice and opportunity for a show cause hearing as specified in section 105.18. *See id.* § 105.18(D).

35. 82 OKLA. STAT. § 1005 (Supp. 1949). This earliest statutory scheme to regulate groundwater replaced the common law American rule of reasonable use that had been recognized by the Oklahoma Supreme Court in *Canada v. City of Shawnee*, 64 P.2d 694 (Okla. 1936), thirteen years prior to the first statutory enactment to regulate use of groundwater.

36. *Id.* § 1003.

use.”³⁷ Additional references to “beneficial use” in this early groundwater act are included in a provision stating that priority claims for “beneficial use” shall relate back to the filing of a permit application and that the priority of claim shall be lost unless the groundwater is actually taken and placed to “beneficial use” within two years from the effective date of the act or within two years after the filing of an application pursuant to the act.³⁸ Finally, the 1949 act provided that the Oklahoma Planning and Resources Board, predecessor agency to the Oklahoma Water Resources Board (OWRB),³⁹ could issue a license or permit to appropriate groundwater after a court adjudication of previously existing rights “if the Board finds . . . that the applicant can place such unappropriated groundwater, or part thereof, to beneficial use”.⁴⁰

In 1972, the Oklahoma Legislature entirely overhauled the 1949 groundwater act. Effective July 1, 1973, the totally revised Oklahoma Groundwater Law replaced the appropriation system (which required little connection with the land surface except for well locations) with an allocation system based on ownership of groundwater.⁴¹ The groundwater allocation system adopted in 1972 provides that the annual amount of groundwater that can be authorized by permit to be pumped is tied directly to the quantum of surface acres of land owned or leased by a permit applicant. The new groundwater law contains a declaration of policy like the 1949 appropriation act, but with two major differences. Instead of a public policy to “conserve and protect” the groundwater resources, the current stated policy is to “utilize” the groundwater resources.⁴² Also, instead of a public policy “to provide reasonable regulations for the taking

37. *Id.* § 1002

38. *Id.* §§ 1005, 1006.

39. *See* 1957 Okla. Sess. Laws, ch. 23, §§ 1, 3.

40. 82 OKLA. STAT. § 1013 (providing that the Board could enforce all necessary regulations to stop the waste of groundwater by new applicants and by existing persons whose rights have been confirmed and adjudicated).

41. *See* 1890 Okla. Terr. Sess. Laws § 4162 (“The owner of the land owns water standing thereon, or flowing over or under its surface, but not forming a definite stream.”). Section 4162’s language is now codified at title 60, section 60. Even though water flowing under the surface but not forming a definite stream has been addressed in property law since before Oklahoma statehood, the Legislature clarified in 1963 that “[t]he use of ground water shall be governed by the Oklahoma Ground Water Law.” 1963 Okla. Sess. Laws, ch. 205, § 1.

42. The seemingly minor change of phrase from “conserve and protect” to “utilize” was recognized as significant by the Oklahoma Supreme Court in *Oklahoma Water Resources Board v. Texas County Irrigation & Water Resources Ass’n, Inc.*, 711 P.2d 38 (Okla. 1984).

and use of groundwater”, the policy now is “to provide reasonable regulations for the allocation for reasonable use based on hydrologic surveys . . . to determine a restriction on production, based upon the acres overlying the groundwater basin”⁴³

Even with the major revision and approach to regulation of the use of groundwater as privately owned property enacted in the 1972 Oklahoma Groundwater Law, the Legislature retained the concept of “beneficial use” in the groundwater law. The 1972 declaration of policy, like its 1949 predecessor, recites verbatim that the public policy is in the interest of agricultural stability, domestic, municipal, industrial and other beneficial uses.⁴⁴ The 1972 revised regulatory scheme also includes a provision requiring review of “beneficial use” before a permit is issued, but with somewhat different language. Instead of providing that the Board may issue a permit if it finds that the applicant can place the unappropriated water requested to beneficial use, the current law provides that before it can issue a permit that allocates the groundwater, the Board must determine whether “the use to which the applicant intends to put the water is a beneficial use”.⁴⁵

Beneficial Use with Corollary of Waste

In addition to the requirement to determine whether the applicant’s proposed use is a beneficial use, the current Oklahoma Groundwater Law requires the Board to determine whether “waste as specified by Section 1020.15” of the Oklahoma Groundwater Law “will occur”.⁴⁶ Unlike the groundwater law, the Oklahoma appropriation law for use of stream water contains no such pre-permit analysis and determination that waste will not occur before use of the water begins. Instead, the appropriation law provides an after-the-fact remedy about actual use of stream water by providing that “the waste of water . . . shall be a misdemeanor and each day such violation occurs shall be a separate violation.”⁴⁷ Like “beneficial use”, the word “waste” is not separately defined in the Oklahoma Groundwater Law or in the stream water appropriation law.

43. 82 OKLA. STAT. § 1020.2 (Supp. 1972).

44. 82 OKLA. STAT. § 1020.2(A) (2011).

45. *Id.* § 1020.9(A)(1)(b); *see also id.* § 1020.9 (A)(2)(b) (requiring issuance of the permit if the required elements are determined in the applicant’s favor).

46. *Id.* § 1020.9(A)(1)(c); *see also id.* § 1020.9(A)(2)(c) (2011). On its face, this statute seems to require proof of the status of all future actions before those actions take place.

47. *Id.* § 105.20.

As a general principle in real property law, “waste” is understood to be injury to land by a person having a possessory interest, whereas those causing injury without a possessory interest could be charged with trespass.⁴⁸ Regarding use of water and waste, the historic view was that water diverted or pumped from the source but not placed to “beneficial use” and let run constituted waste.⁴⁹ More specifically, the California Supreme Court stated:

An accepted definition of the term “waste” as applied to the use of water, may be said to be: “To use needlessly or without valuable result; to employ prodigally or without any considerable return or effect, and to use without serving a purpose. (Webster’s New International Dict. 2nd ed.)”⁵⁰

The Oklahoma Groundwater Law does not contain a definition of “waste” but instead contains an enumeration of actions or activities that constitute “waste” which the OWRB must prohibit, either before a permit to use groundwater is issued or after a permit is issued.⁵¹ Eight of the ten items of “waste” relate to actions or activities that could deplete an amount of groundwater, while the other two items relate to actions that could cause pollution of groundwater.⁵² The distinction between “waste by depletion” and “waste by pollution” was first formulated and announced by the Oklahoma Supreme Court in a 1984 case involving the proposed use of fresh groundwater for tertiary recovery of oil.⁵³

48. See *Camden Trust Co. v. Handle*, 26 A.2d 865 (N.J. 1942); 2 BLACKSTONE’S COMMENTARIES 281; see also 60 OKLA. STAT. § 69.

49. 1 SAMUEL C. WIEL, WATER RIGHTS IN THE WESTERN STATES § 481 (3d ed. 1911); CLESSON SELWYNE KINNEY, A TREATISE ON THE LAW OF IRRIGATION § 166 (1894); see also KAN. STAT. ANN. § 42-394 (2000).

50. *Meridian, Ltd. v. City & County of San Francisco*, 90 P.2d 537 (1939).

51. 82 OKLA. STAT. § 1020.15(A). Prior to a 2001 amendment, the provision in title 82, sections 1020.9(A)(1)(c) and 1020.9(A)(2)(c) regarding the determination of whether waste will occur as an element of proof before a permit could be issued did not cross reference section 1020.15.

52. *Id.* § 1020.15(A). Two actions that could deplete the amount of water in a groundwater basin include: (1) taking or using fresh groundwater in any manner so that the water is lost to beneficial use and (2) using fresh groundwater in such an inefficient manner that excessive losses occur. An action that can be considered to be waste by pollution is the “[p]ermitting or causing the pollution of a fresh water strata or basin through any act which will permit fresh groundwater polluted by minerals or other waste to filter or otherwise intrude into such a basin or subbasin.” *Id.* § 1020.15(A)(7).

53. See *Okla. Water Res. Bd. v. Tex. Cnty. Irrigation & Water Res. Ass’n*, 711 P.2d 38 (Okla. 1984) [hereinafter *Mobil Tertiary Case*]. Secondary recovery uses only water under

In the *Mobil* tertiary case, the Court relied on the broad definition of “waste” set forth in the rules promulgated by the OWRB⁵⁴ and a broad statutory definition of “pollution” contained in an act relating to wastewater discharges and water quality standards⁵⁵ to determine that the Board had not properly and sufficiently reviewed evidence submitted at the administrative hearing on an oil company’s application for the permit to use groundwater from the Ogallala aquifer in its proposed tertiary recovery processes and had not sufficiently considered possible contamination of fresh groundwater. In the *Mobil* tertiary case opinion, the Court also noted that “[t]he concepts of beneficial and non-wasteful use are not identical as urged by the Board.”⁵⁶

Justice Kauger, concurring in the *Mobil* tertiary case, noted that the OWRB defined “beneficial use” by rule as “the use of such quantity of stream or groundwater when reasonable intelligence and reasonable diligence are exercised in its application for a lawful purpose.”⁵⁷ Justice Kauger further explained:

When alternative methods can be used or developed for enhanced recovery of hydrocarbons, it is not a reasonable exercise of reasonable intelligence and reasonable diligence to sanction a process which causes a loss of unestimated billions of gallons of fresh groundwater, while we search for some means to recharge the Ogallala's source.⁵⁸

Before its 1984 *Mobil* tertiary case decision to bifurcate the “waste” analysis into “waste by depletion” and “waste by pollution,” the Oklahoma Supreme Court considered the interrelationship of “beneficial use” and

pressure to recover oil, while tertiary recovery contemplates use of water mixed with chemicals under pressure for oil recovery.

54. Rule 125.1, which contained definitions for all chapters of the Board’s rules, including a chapter on taking and use of groundwater and a chapter on pollution, wastewater discharges, and water quality standards. Since 1991, all administrative agency rules have been codified in a uniform format, designated as the Oklahoma Administrative Code, and with a separate definition section applicable to each separate chapter to avoid confusion and inappropriate cross-referencing.

55. See 82 OKLA. STAT. § 926.1 (1981) (current version at 82 OKLA. STAT. § 1084.2).

56. *Mobil Tertiary Case*, 711 P.2d at 44, 47-48. Filings by the Board in that case do not show that the Board urged that beneficial use and non-wasteful use were identical.

57. Rule 125.2, now codified in section 785:30-1-2 of the Oklahoma Administrative Code. See discussion regarding the definition of beneficial use *infra* at note 70.

58. *Mobil Tertiary Case*, 711 P. 2d at 63 (Kauger, J., concurring).

“waste” as pre-permit issuance considerations in the Oklahoma Groundwater Law just three years after the 1972 act became effective.⁵⁹

In *Lowrey v. Hodges*,⁶⁰ the Oklahoma Supreme Court analyzed both statutory pre-permit requirements to determine whether the proposed use is a beneficial use and whether waste will occur in the use of the water. The Court relied on the statutory listing of “agricultural stability” in the declaration of policy for the Oklahoma Groundwater Law⁶¹ and “irrigation” in the list of “beneficial uses” contained in rules of the OWRB⁶² to affirm the Board’s administrative conclusion of law that the proposed use for irrigation is a “beneficial use.” The Court noted that the issue of whether irrigation to grow food and fiber is a beneficial use was “settled by legislative act” when the Legislature listed “agricultural stability” in the act’s declaration of policy, and as supported by the agency rule definition of “beneficial use” that includes “irrigation.”⁶³ The statement by the Court in *Lowrey* that the proposed irrigation use was settled by legislative act to be a beneficial use supports a view that, at least for the allocation law regulating use of groundwater, a kind of use contained in a statutory list is presumed to be a “beneficial use”.

The Court in *Lowrey* went on to review the administrative record which contained the applicant’s testimony about the specific flood irrigation process proposed and that recommendations of the Soil Conservation Service about the irrigation project would be followed.⁶⁴ The Court concluded that the evidence was sufficient to determine that the irrigation use proposed was a beneficial use and the plans on their face did not show waste and recognized that once an applicant provides evidence of the method intended for irrigating a particular area, the burden shifts to the protestant to show that waste will occur.⁶⁵ The Court then explained that “further questions regarding waste must await completion of the project” and that the “definitions of waste in 82 O.S. 1975 Supp. §1020.15 contemplate an after-the-fact finding of waste with procedure for criminal

59. Although the act was adopted in 1972, it had a stated effective date of July 1, 1973. See 1972 Okla. Sess. Laws ch. 248, § 24.

60. 555 P.2d 1016 (Okla. 1976).

61. 82 OKLA. STAT. § 1020.2 (Supp. 1972).

62. Rule 600.1(g) (1973).

63. *Lowrey*, 555 P.2d 1016, 1022-23 (Okla. 1976).

64. *Id.* at 1023.

65. *Id.*

prosecution, injunction and suspension of permit when and if it [waste] occurs.”⁶⁶

Two principles can be identified from the Court’s joint analysis of beneficial use and waste in *Lowrey*. First, the elements required to show beneficial use and the elements required to show that waste will not occur at the pre-permit stage of proceedings are very closely connected and treated as corollary. Second, applicants seeking permits to use groundwater face a minimal burden to show that the use proposed is a beneficial use and persons opposed to the granting of the permit have the heavier burden to produce positive evidence that the proposed use will result in waste (and therefore non-beneficial use). Perhaps the Court recognized the near impossible burden on an applicant to show positive evidence at the application stage of future events regarding the use of the water, i.e., that waste “will not” occur in the use of the water. Additionally, the view that applicants seeking to use groundwater should have a lesser burden of proof is consistent with the law that recognizes private property ownership in groundwater,⁶⁷ that applicants must own or lease the lands from which the groundwater will be pumped,⁶⁸ and is consistent with a philosophy that government oversight (and costs to owners) of the use of private property should be minimized to the extent possible.

Like the stream water appropriation law, the Oklahoma Legislature has not provided a statutory definition of “beneficial use” in the Oklahoma Groundwater Law. Instead, the Legislature has included specific types of uses for water in two non-exclusive lists that describe “beneficial uses.”⁶⁹ The definition of “beneficial use” contained in rules of the OWRB⁷⁰ likewise includes a non-exclusive list of uses that are described as “beneficial uses.” However, the identical definitions of “beneficial use” contained in rules of the Board relating to appropriation of stream water and to taking and use of groundwater also contain a separate narrative description or criteria to be used to analyze whether a particular use of water is a beneficial use. The narrative portion of the definition was promulgated on 1964 about ten years before the non-exclusive list of uses was added in 1973. Whether the narrative portion of the existing rule

66. *Id.*

67. Oklahoma’s property law has long declared that the owner of the land owns the groundwater under the land. *See* 60 OKLA. STAT. § 60 (2011).

68. *See* 82 OKLA. STAT. § 1020.9(A)(1)(a) (2011).

69. *See id.* § 1084.1 (describing public policy on pollution prevention that “impairs domestic, agricultural, industrial, recreational and other legitimate beneficial uses of water”).

70. OKLA. ADMIN. CODE §§ 785:20-1-2, 785:30-1-2 (Supp. 2010).

definition of “beneficial use” remains available to test for a beneficial use should be considered.

Beneficial Use Defined by Rule

A noted writer on early appropriation law long ago observed that the terms “beneficial purpose” and “beneficial use” are so inherently part of water law that they do not lend themselves to accurate definition.⁷¹ Western courts have been reluctant to establish a concrete judicial definition, state legislatures have left the legal term of art open-ended and flexible, and state agencies often have simply listed types of uses that are considered beneficial.⁷² Some of these more unusual uses include turning water onto a meadow to strand fish for tribal fishing,⁷³ frost prevention,⁷⁴ and flushing fields after irrigation season to remove elements left on the soil by groundwater.⁷⁵ Types of uses that have failed the beneficial use test include soaking a field to make it easier to plow,⁷⁶ flooding fields in winter to form ice to preserve soil moisture,⁷⁷ flooding to drown gophers in a

71. Wells A. Hutchins, *Selected Problems in the Law of Water Rights in the West*, U.S. Dep’t. of Agric. (1942) (citing *Denver v. Sheriff*, 96 P.2d 836 (Colo. 1939), wherein the Court stated that beneficial use is a question of fact and depends on the circumstances in each case).

72. John MacPherson, Richard A. Stacey & William H. Vines, *Water Appropriation for Recreation*, 1 LAND & WATER L. REV. 209, 210-11 (1966); Idaho Dep’t of Parks v. Idaho Dep’t of Water Admin., 530 P.2d 924, 927 (Idaho 1974) (“While it is well established in western water law that an appropriation of water must be made for a ‘beneficial use,’ nevertheless in Idaho at least the generic term ‘beneficial use’ has never been judicially or statutorily defined. Our research does not disclose any case in which any court has attempted to define the term ‘beneficial use.’”); *City & County of Denver v. Sheriff*, 92 P.2d 836, 842 (Colo. 1939) (“What is beneficial use, after all, is a question of fact and depends upon the circumstances in each case.”).

73. *Lobdell v. Hall*, 3 Nev. 507, 525 (1868). The court found by implication that stranding fish was found to be a beneficial use: “I cannot see but that it is just as legitimate for an Indian to turn water over meadow-lands, to enable him to catch fish for his subsistence, as for a white man to turn it over the same land to increase the growth of grass.” *Id.*

74. *Neubert v. Yakima-Tieton Irrigation Dist.*, 814 P.2d 199, 202 (Wash. 1991) (en banc).

75. *Benz v. Water Res. Comm’n*, 764 P.2d 594 (Or. Ct. App. 1988).

76. *Hennings v. Water Res. Dep’t*, 622 P.2d 333 (Or. Ct. App. 1981).

77. *Blaine Cnty. Inv. Co. v. Mays*, 291 P. 1055, 1057 (Idaho 1930).

critically short water area,⁷⁸ and carrying away debris to aid in power generation (during the irrigation season).⁷⁹

Even though the Oklahoma Legislature has not provided a statutory definition of “beneficial use”, it has provided at least two non-exclusive lists of uses⁸⁰ that are considered “beneficial uses” through the rule of ejusdem generis.⁸¹ A list of uses that are considered beneficial uses is also set forth in the rule definition that contains the narrative sentence which reads as follows:

“Beneficial use” means the use of such quantity of stream or groundwater when reasonable intelligence and reasonable diligence are exercised in its application for a lawful purpose and as is economically necessary for that purpose. Beneficial uses include but are not limited to municipal, industrial, agricultural, irrigation, recreation, fish and wildlife, etc.⁸²

Note that the first sentence of the rule definition itself contains the phrase “stream or groundwater” so the identical language is found in the separate chapter of OWRB administrative rules on appropriation of stream water and the chapter on taking and use of groundwater.

The definition of “beneficial use” first appeared in rules of the OWRB promulgated in 1964.⁸³ The 1964 version contained only the first narrative sentence as found in the current rule quoted above and with the minor word difference of “water” instead of “stream or groundwater”. Of note, the Texas Water Code contains a definition similar to the narrative sentence found in the OWRB rule definition.⁸⁴

The second sentence of the OWRB rule definition, containing a non-exclusive list of uses that might be considered to be “beneficial uses”, did not appear in the agency rules until 1973.⁸⁵

78. *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 1007 (Cal. 1935).

79. *In re Water Rights of Deschutes River & Tributaries*, 286 P. 563 (Or. 1930).

80. 82 OKLA. STAT. §§ 1020.2, 1084.1 (2011); *see supra* note 60.

81. *See Powers v. Carson*, 567 P.2d 90 (Okla. 1977), for a discussion of statutory construction rule of ejusdem generis.

82. *Mobil Tertiary Case*, 711 P.2d 38, 44 (Okla. 1984).

83. *See* Rule 115.1 (1964).

84. TEX. WATER CODE ANN. § 11.002(4) (West 2011) (defining beneficial use to mean “use of the amount of water which is economically necessary for a purpose authorized by this chapter, when reasonable intelligence and reasonable diligence are used in applying the water to that purpose and shall include conserved water”).

85. *See* Rules 300.1(o), 600.1(g) (1973).

The narrative portion of the definition, which provides a criterion or test for the adjective “beneficial” as it relates to the noun “use”, raises the issue of whether the Board should presumptively conclude that an applicant’s intended use is a “beneficial use” simply because the intended purpose is one listed in the second sentence as a beneficial use.⁸⁶ The Oklahoma Supreme Court in the *Lowrey* case seemed to say that a use in a statutory list is a beneficial use by mentioning that whether irrigation to grow food and fiber is a beneficial use “was settled by legislative act.”⁸⁷ The Court in *Lowrey* may have been justified in ignoring the narrative first sentence of the rule definition for a variety of reasons whereas a court considering an application for a permit to appropriate stream water may not for the following reasons.

First, the Oklahoma Groundwater Law considered in *Lowrey* contains the declaration of policy statement from the Legislature that includes “agriculture stability” within a statutory list of “beneficial uses”. There is no such declaration of policy statement containing a list of beneficial uses in the appropriation statutes governing use of stream water. Accordingly, whether a proposed use of stream water for agriculture stability or irrigation should be presumed to be a “beneficial use”, at least at the permit application stage, has not been “settled by legislative act” for the appropriation law and therefore the narrative provision of rule definition could be used in the analysis.

Second, in addition to making a determination as to whether an intended use is a beneficial use, the Oklahoma Groundwater Law also requires the OWRB, at the same pre-permit stage, to determine whether waste will occur.⁸⁸ The Court in *Lowrey* quickly moved from its discussion of a presumption that water for irrigation is a beneficial use to consider the administrative hearing testimony about the flood irrigation project proposed in light of precepts of “waste” and the burden of proof shift from the applicant to the protestant. The Court specifically acknowledged that an after-the-fact analysis of waste can be made after the project is complete,⁸⁹ confirming the view that before-the-fact proof to show that waste will not occur can be minimal.

86. While irrigation is a use in the list of uses that are considered “beneficial uses” set out in the second sentence, the Board could rely on the first sentence to conclude that proposed irrigation of marijuana plants, an unlawful activity in Oklahoma, is not a beneficial use.

87. *Lowrey v. Hodges*, 555 P.2d 1016, 1022 (Okla. 1976).

88. 82 OKLA. STAT. § 1020.9 (Supp. 1972).

89. *Lowrey*, 555 P.2d at 1023.

The statutes governing the appropriation of stream water, unlike those governing the taking and use of groundwater, do not contain a corresponding requirement for the Board to determine whether waste will occur, at least at the application stage.⁹⁰ However, somewhat similar to the after-the-fact analysis mentioned in *Lowrey*, the appropriation statutes provide for substantially more administrative oversight of actions taken or not taken after an appropriation permit is issued by provisions⁹¹ that more specifically implement the foundational element of appropriation that “beneficial use is the basis, the measure, and the limit to the right to the use of water.”⁹²

A third possible justification for the Court in *Lowrey* to avoid discussing the narrative sentence in the rule definition of “beneficial use” is that the allocation system enacted by the 1972 overhaul of the Oklahoma Groundwater Law on its face establishes the reasonable quantity of groundwater that can be authorized by a permit. The narrative provision of the rule definition provides that beneficial use is “the use of such quantity of groundwater when reasonable intelligence and reasonable diligence are exercised in its application”⁹³ This narrative criteria, particularly with the word “reasonable” used twice, could lead to ad hoc determinations as to quantities of water that might be considered “beneficial”. For instance, reasonable intelligence and reasonable diligence may show that irrigating corn in an arid area like the Oklahoma Panhandle requires a much different quantity of water than irrigating soy beans in areas that get much more rain on average like the eastern one-third of the state. However, the need to provide specific facts about an intended use and quantities of water needed may have been eliminated by the allocation approach adopted by the 1972 Oklahoma Groundwater Law. The declaration of policy for that law states that the “purpose [is] to provide reasonable regulations for the allocation for reasonable use based on hydrologic surveys . . . to determine a restriction on the production, based upon the acres overlying the ground water basin or subbasin.”⁹⁴ The statutes go on to direct the OWRB to determine the

90. *But see* 82 OKLA. STAT. § 105.20 (“The waste of water . . . shall be a misdemeanor” and “the Board [can] bring an action . . . to enjoin the same.”).

91. *See, e.g., id.* § 105.15 (commencement of works); *id.* § 105.16 (time for putting water to beneficial use); *id.* § 105.25 (notice of completion of works) *id.* § 105.26 (certificates of completion).

92. *Id.* § 105.2(A).

93. *Mobil Tertiary Case*, 711 P.2d 38, 61 (Okla. 1984) (Kauger, J. concurring).

94. 82 OKLA. STAT. § 1020.2(A) (2011).

“maximum annual yield” of all groundwater basins⁹⁵ and that a “regular” permit “shall allocate” the equal proportionate part of such yield to each acre overlying the basin,⁹⁶ and finally that before maximum annual yield determinations are made, “temporary” permits that allocate two acre-feet of groundwater per acre of land overlying the basin can be issued.⁹⁷ Because the quantity of groundwater to be allocated by a “regular” or “temporary” permit is an amount established through provisions of the Oklahoma Groundwater Law, the narrative criterion language in the rule definition of “beneficial use” that could result in ad hoc determinations as to quantities of water that constitute a beneficial use could be deemed inconsistent with the Oklahoma Groundwater Law.⁹⁸

The narrative criterion language in the rule definition of “beneficial use” may be more useful in context of the statutes on appropriation of stream water. At the pre-permit stage of considering an application for a permit to appropriate, the OWRB must consider several matters, the first being whether there is unappropriated water available in the amount applied for.⁹⁹ The next matter that the Board must determine is that the “applicant has a present or future need for the water and the use to which applicant intends to put the water is a beneficial use.”¹⁰⁰ By virtue of being in the same sentence, the “present or future need” determination is directly tied to the “beneficial use” determination.

The rules of the OWRB indirectly make this connection within the provisions on the present or future need element. These rules begin by stating: “In considering the amount of water requested, the Board may review the efficiency of the works proposed to place the water to beneficial use and may order modifications to such works or that different works be utilized.”¹⁰¹ The provision on “present or future need” explains that for public water supply or municipal use, the Board may review population projections for areas served or proposed to be served,¹⁰² and that for proposed irrigation use, the Board will consider a specified technical report

95. *Id.* §§ 1020.4–1020.6.

96. *Id.* § 1020.9(B).

97. *Id.* § 1020.11(B)(1)-(2).

98. *But see Mobil Tertiary Case*, 711 P.2d at 63 (Okla. 1984) (Kauger, J., concurring).

99. 82 OKLA. STAT. § 105.12(A)(1).

100. *Id.* § 105.12(A)(2).

101. OKLA. ADMIN. CODE § 785:20-5-5(c)(1) (2006).

102. *Id.* § 785:20-5-5(c)(2).

of the Bureau of Reclamation about estimated demands for crops within the state.¹⁰³

The “future need” part of the present or future need element, as a matter for which the applicant must provide evidence for the Board’s required determination, is often associated with the consideration of whether a “schedule of use” for the total amount of water requested should be approved, and typically involves major water projects that take several decades to develop fully where the user must lock in water rights initially to ensure legal availability of water for future decades. The appropriation law provides a default period of seven years from the date of permit issuance within which the permit holder has to put the full amount (100%) authorized to beneficial use, unless a schedule of use is approved to authorize a longer period within which to put the full amount to use.¹⁰⁴ Even with long-term plans that might trigger consideration of a schedule of use, the rule definition of beneficial use and provisions of the rule on considering present or future need provide authority to the Board to review efficiency of the works proposed at the application stage of the proceedings, and even order changes to the works. In this context, works can include a proposed reservoir to be constructed or an existing reservoir.

Although “present or future need” and “beneficial use” are linked in the statute and the substantive rule about present or future need and the rule definition of “beneficial use” focuses on the quantity of water proposed to be used, the showing of a present or future need alone is not sufficient under the Board’s rules for the Board to determine that the intended use is a beneficial use.

Although the Court in *Lowrey* indicated that irrigation was a beneficial use for purposes of considering an application for a permit to use groundwater as a matter “settled by legislative act”,¹⁰⁵ applicants for appropriation permits should be aware that the rule definition of “beneficial use” could be raised to support the proposition that evidence separate from that relied on to establish a present or future need is required to establish

103. *Id.* § 785:20-5-5(c)(3).

104. 82 OKLA. STAT. § 105.16(A) (2011). A full discussion of the implications of the beneficial use requirements and loss of rights for nonuse can be found in R. Thomas Lay, *The Beneficial Use Requirements of the Appropriative Water Right and the Forfeiture of Rights Through Nonuse*, 37 OKLA. L. REV. 67 (1984).

105. *See supra* note 58.

that the intended use is a beneficial use, even if the intended use is mentioned in the list contained in the rule definition of “beneficial use.”¹⁰⁶

Beneficial Use and Post-Permit Water Management

The previous portion of this article focused on the scope of the principle of “beneficial use” in the context of considering whether a permit to appropriate stream water or take and use groundwater should be issued. Once a permit is issued, the principle of “beneficial use” and its corollary principle of “waste” may be relied on by the permit issuing agency to mandate modifications or alterations in works or operations to ensure that beneficial use of the water continues.

The *Lowrey* case recognizes that efficiency of a project to use groundwater for irrigation is subject to an “after-the-fact” waste review.¹⁰⁷ One of the actions or activities listed in Section 1020.15(A) of the Oklahoma Groundwater Law that constitutes “waste” is “[u]sing fresh groundwater in such an inefficient manner that excessive losses occur.”¹⁰⁸ This language describes a kind of waste by depletion, with the subjective words “inefficient” and “excessive,” and invites an ad hoc consideration based on facts and circumstances as to whether a permit holder can be cited for “after-the-fact” waste due to inefficiency in use of the groundwater. Whether flood irrigation methods that were acceptable such as those addressed in the 1976 *Lowrey* case would be authorized today or whether flood irrigation practices should be allowed to continue even if originally approved as beneficial use are issues requiring additional scrutiny.

More efficient low pressure pivot sprinkler systems or even more efficient drip irrigation now available could trigger a finding that flood irrigation practices result in waste by “using fresh groundwater in such an inefficient manner that excessive losses occur.”¹⁰⁹ However, the rule definition of “beneficial use,”¹¹⁰ providing for consideration of the quantity that is “economically necessary” for a purpose along with “reasonable intelligence” and “reasonable diligence,” rebuts the assertion that flood irrigation results in “waste.” If the acquisition costs of a new more efficient pivot sprinkler system or drip irrigation system to replace the existing flood

106. See section 785:20-1-2 of the Oklahoma Administrative Code (2011) for a definition of beneficial use in the rules on appropriation of stream water.

107. See *Lowrey v. Hodges*, 555 P.2d 1016 (Okla. 1976).

108. 82 OKLA. STAT. § 1020.15(A)(5) (2011).

109. *Id.*

110. See *supra* text at accompanying note 81.

irrigation practice are not feasible in relation to crop prices, the use of the amount of water used for continued flood irrigation could be deemed “beneficial use” even if more efficient systems are available.

Unlike the Oklahoma Groundwater Law, the Oklahoma stream water appropriation law does not require a pre-permit determination that waste will not occur. Moreover, the appropriation law does not contain a definition of “waste” nor does the appropriation law enumerate a list of actions or activities that constitute waste like the Oklahoma Groundwater Law. However, Oklahoma’s appropriation law does provide as a general matter that “the waste of water” is a misdemeanor and subject to an action for injunction by the Board.¹¹¹

The fundamental policy that “beneficial use is the basis, the measure and the limit to the right to the use of water”¹¹² along with other provisions of law designed to ensure that the amount of water authorized to be used by a permit is actually put to beneficial use¹¹³ elucidate, to an extent, the uncertainty with respect to the meaning of “waste” in stream water appropriation law. For example, the Board must inspect the works constructed for purposes of utilizing the water. During this inspection, the Board must determine actual capacity, safety and efficiency of the works, and must issue a certificate of completion setting forth any limitations on the water right as warranted by the condition of the works.¹¹⁴ However, the appropriation law is silent as to the ability of the OWRB to impose additional conditions or limitations on the water right after the certificate of completion of works is issued. If a complaint of waste is lodged, the Board will investigate the situation and if attempts to obtain voluntary compliance fail, the Board could file a complaint with the district court seeking to enjoin the waste. The Board could possibly also enter into a stipulation and settlement to ensure that the appropriation right holder implements efficiencies to reduce water usage and avoid further waste. Unlike the Oklahoma Groundwater Law provision on preventing waste,¹¹⁵ the stream water appropriation law does not contain a specific provision authorizing

111. 82 OKLA. STAT. § 105.20.

112. *Id.* §105.2(A).

113. *See supra* text accompanying notes 26-33.

114. 82 OKLA. STAT. §§ 105.25-105.26.

115. *Id.* § 1020.15(B).

the Board to hold an administrative hearing and issue an order to prevent waste.¹¹⁶

The State of California has addressed efficiencies in the use of water by appropriators after they received a water right through reliance of the California Constitution, Article X, Sec. 2, which requires:

the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.

Not long after the California Constitution was amended in 1928 to add the quoted provision about water, the California Supreme Court succinctly recognized that “[w]hat is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time.”¹¹⁷ This succinct recognition played out in 1984. The State Water Resources Control Board, relying on the above-quoted provision of the California Constitution relating to beneficial use and waste, issued its Decision 1600 and found that the traditional conservation actions of the Imperial Irrigation District (IID) were insufficient and allowed waste of water. The Control Board ordered the IID (which held water rights dating from 1950) to submit a detailed plan for control of excessive leach and tail water, canal seepage, and canal spills, and to develop rigorous water accounting and monitoring procedures to quantify actual water deliveries and system losses.¹¹⁸ Implementation of the water conservation plans cost the IID over \$100 million.¹¹⁹

A more recent motivation for the California State Water Resources Control Board to require the Imperial Irrigation District to implement

116. *But see id.* § 1085.2(8) (providing general authority of the Board to institute actions before any board or commission to prevent the use, misuse, appropriation or taking of any waters of this state which is a violation of any law or rule or order of any agency).

117. *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 1007 (Cal. 1935).

118. Charles F. Wilkinson, *Western Water Law in Transition*, 56 U. COLO. L. REV. 317, 337 (1985). The Control Board’s authority to impose conservation measures on the existing right was affirmed by the California Court of Appeals. *See Imperial Irrigation Dist. v. State Water Res. Control Bd.*, 231 Cal Rptr. 283 (App. 1986).

119. *See Report to California Legislature on the Current Condition of the Salton Sea and the Potential Impacts of Water Transfers*, COLO. RIVER BD. OF CAL., Apr. 1992, available at <http://www.sci.sdsu.edu/salton/PotentialImpactsSaltonSea.html>.

additional conservation measures is the state's need to reduce reliance on the Colorado River and comply with the Quantification Settlement Agreement (QSA) entered in 2003.¹²⁰ The QSA allows the IID to market its conserved irrigation water for the San Diego County Water Authority municipal use. Reliance on the overarching ongoing obligation for continued beneficial use of water as an opportunity to mandate or impose after-the-fact conservation practices may be appropriate to address large scale regional or state-wide water shortages such as that faced by California. Such mandates may be unnecessary in Oklahoma where the statewide inventory of water supply is not so stressed. Instead, the non-interference provision of Oklahoma's appropriation law has been more suitable to address individual or localized drought or water shortage situations.

Beneficial Use and Interference

The non-interference law is found in the provision that lists the requirements that must be shown before the OWRB can issue a permit to appropriate (i.e., a pre-permit or before-the-fact determination) and states that the Board must determine from the evidence whether "[t]he proposed use does not interfere with domestic or existing appropriative uses."¹²¹

One of the priority recommendations adopted by the OWRB in the 2012 Update of the Oklahoma Comprehensive Water Plan is to maintain statewide water use at current (2010) levels through 2060.¹²² The Board suggests among other possibilities that this aggressive goal should be supported with implementation of incentives to improve irrigation practices, farming techniques, green infrastructure and retrofitting infrastructure. To the extent that economics drives conservation and implementation of efficiencies in use of water, for instance by saving fuel or electric service costs by pumping less water, the imposition of more stringent management actions through post-permit scrutiny of beneficial use and waste, issuing orders or seeking injunctive relief, may prove unnecessary.

Technical information gathered as part of the 2012 Update to the Oklahoma Comprehensive Water Plan confirms that Oklahoma is not

120. See *Qualification Settlement Agreement (QSA) Cases*, SUPERIOR COURT OF CAL., COUNTY OF SACRAMENTO, <http://www.saccourt.ca.gov/coordinated-cases/qa/qa.aspx> (last visited Sept. 14, 2012).

121. See 82 OKLA. STAT. § 105.12(A)(3) (2011).

122. See OWRB EXECUTIVE REPORT, *supra* note 4, at 14.

facing a water shortage similar to California's situation.¹²³ Accordingly, the OWRB may not face the urgency to impose restrictions and limitations on use by enforcing efficiencies through beneficial use and waste requirements of Oklahoma law. This observation is made with a significant caveat: the water supply availability technical information gathered as part of the Comprehensive Water Plan update is reported on an annualized volume basis, in acre-feet per year (AFY).

Consideration of the annual volume of water in AFY for the comprehensive water planning effort is consistent with the measurement of water considered for stream water appropriation permits and permits for taking and use of groundwater. Oklahoma law expressly recognizes two standards to measure water as follows:

The standard of measurement of the flow of water shall be the cubic foot per second of time; the standard measurement of the volume of water shall be the acre foot, being the amount of water upon an acre covered one foot deep, equivalent to forty-three thousand five hundred sixty (43,560) cubic feet.¹²⁴

The annual volume measurement, in AFY, lends itself to appropriation permitting for at least two reasons. First, Oklahoma's appropriation law defines a "regular" permit as "a permit granted by the OWRB to appropriate water on a *year-round basis* in an amount and from a source approved by the Board,"¹²⁵ as distinguished from a "seasonal permit" that authorizes the holder "to divert available water for specified time periods during the calendar year."¹²⁶ Second, the Board estimates water availability¹²⁷ from the most readily available information, which is mean annual flow¹²⁸ data gathered by the United States Geological Survey

123. *See id.* at 2-12 through 2-15.

124. 82 OKLA. STAT. § 105.28.

125. *Id.* § 105.1(3) (emphasis added).

126. *Id.* § 105.1(4).

127. *Id.* § 105.12(A)(1) (providing that the first matter that the Board must determine before issuing a permit to appropriate is whether there is unappropriated water available in the amount applied for). The Board subtracts previously appropriated amounts from the total water available to calculate the unappropriated water available amount.

128. To implement the statute requiring a determination of whether there is unappropriated water available in the amount applied for, section 785:20-5-5(a)(1) of the Oklahoma Administrative Code explains that for a proposed direct diversion from a stream, the determination shall take into consideration, among other information, the mean annual flow and stream gage information. According to section 785:20-5-5(a)(2), if the proposed

(USGS) through the stream gage system operated and maintained by the USGS. Although the word “flow” is used in the rule to describe the stream gage measurement information that is used to determine water availability, the annualization of the flow information results in a volume measure in acre-feet per year (AFY). The rules of the Board on applications for permits to appropriate stream water, particularly the application form, elicit minimal information about method of diversion proposed.¹²⁹ Accordingly, the cubic feet per second (CFS) standard of measure to determine water availability or to establish the amount authorized to be diverted is not typically implemented by the Board.

The Oklahoma Groundwater Law likewise focuses on the acre foot volume as the standard measurement of water in light of the allocation system based on acres of land overlying a groundwater basin and the maximum annual yield determined for the basin.¹³⁰ Accordingly, “temporary” permits to use groundwater (those issued before a maximum annual yield is determined) and “regular” permits to use groundwater (those issued after a maximum annual yield is determined) quantify the amount authorized to be pumped by the volume standard of measure, in AFY.

Quantifying the amount authorized to be used with an AFY volume measure for both stream water permits and groundwater permits provides only a gross annual limitation or restriction on use of the water. The extent of impacts on stream flow from the proposed stream water use in terms of the standard of measurement of flow, CFS, is not usually considered in issuing permits based on the AFY volume measure. Specific limitations or restrictions on rate of diversion of stream water or rate of withdrawal from pumping groundwater are rarely included as limits in water use permits issued by the Board, although the Board has authority to impose such conditions on use of public water from a definite stream (stream water)¹³¹ and the taking and use of groundwater.¹³²

diversion is from a lake or other impoundment, the water yield from the storage measured in acre-feet per year is considered.

129. See OKLA. ADMIN. CODE § 785:20 app. A (2010).

130. 82 OKLA. STAT. §§ 1020.2, 1020.6, 1020.9(B).

131. See *Okla. Water Res. Board v. Cent. Okla. Master Cons. Dist.*, 464 P. 2d 748 (Okla. 1968) (observing that the state’s power to control unappropriated public waters in plenary); see also *Op. Okla. Att’y Gen.* 253 (1972). Rules of the Board, OKLA. ADMIN. CODE § 785:20-5-5(d)(2)(2011), provide that

[t]he Board may determine that conditions or restrictions are necessary to protect existing beneficial uses and rights and may establish and impose such conditions on certain stream flow whereby direct diversion may be allowed only during certain times of the year or when a certain level of stream flow or

The issue of whether to impose pumping or withdrawal rate restrictions on permits to pump groundwater is often presented in administrative proceedings on permit applications by protesting owners of land having existing wells located near a well site proposed by an applicant. The OWRB recognizes that the pumping of groundwater from one well may affect pumping from another well, but that the burden of proof to demonstrate that such pumping effects are “unreasonable” is high.¹³³ A private cause of action for damages to property may be an alternative remedy to address impacts to groundwater caused by pumping by others.¹³⁴

The issue of whether to impose flow restrictions on permits to appropriate stream water in Oklahoma is occasionally raised in administrative proceedings on permit applications. The issue typically arises in the context of the statutory requirement that before issuing a permit to appropriate, the Board must determine whether “the proposed use does not interfere with domestic or existing appropriative uses.”¹³⁵

Without a protest of an application being presented, interference in this context is typically considered on a volume measure, i.e., AFY. The statute mentions two categories of users to be protected from interference: domestic users and appropriative users. Rules of the Board address the domestic use interference issue by subtracting a presumed amount of water (six AFY for each domestic user) from the total amount of water (in AFY) that might otherwise be available for appropriation at the proposed point of diversion.¹³⁶ The presumption is made that if sufficient water is made

elevation in the stream is reached. In some cases, the Board may determine that water storage is necessary.

Id.

132. 82 OKLA. STAT. § 1020.9(D) (providing that a permit to use groundwater “shall specify the location of the permitted well or wells and other terms and conditions as specified by the Board, including but not limited to, the rate of withdrawal, the level of perforating and the level of sealing the well”).

133. *See Messer-Bowers, Inc. v. State ex rel. Okla. Water Res. Board*, 8 P.3d 877 (Okla. 2000) (recognizing the OWRB’s limitation imposed on the number of wells authorized as reasonable).

134. *See City of Enid v. Crow*, 316 P.2d 834 (Okla. 1957).

135. 82 OKLA. STAT. § 105.12(A)(3).

136. OKLA. ADMIN. CODE § 785:20-5-5(a)(2) (providing that “absent the presentation of more accurate evidence to the contrary, the Board shall estimate the amount of water required for domestic use to be six (6) acre-feet per household per year or three (3) acre-feet per non-household domestic use”). Informal staff policy used to implement this rule suggests that a presumption is made that one riparian domestic use household exists on every quarter section of land bordering a stream downstream from the applicant’s proposed point of diversion to the confluence of the next larger stream, and the total number of presumed

available for domestic use, measured in AFY and corresponding to the AFY volume measure used calculate total water availability, then the applicant's proposed use will not interfere with such domestic uses. Similarly, the AFY amounts authorized by existing appropriative rights (senior appropriators) upstream and downstream from the applicant's proposed point of diversion are subtracted from the estimated total AFY amount available based on the mean annual flow information.¹³⁷

By way of a hypothetical example, if the total amount of available water at the proposed point of diversion based on stream gage measure of mean annual flow¹³⁸ is 1,000 AFY and there are 10 riparian households downstream from the proposed point of diversion and one existing (senior) appropriative right authorizing 100 AFY from a downstream point of diversion, the unappropriated water available for the applicant would be 840 AFY (1,000 – 60 – 100). A determination can then be made that that because there is unappropriated water available (in AFY volume) in the amount applied for, there is a presumption that there will not be interference with domestic users or existing appropriative users.

If a domestic user or appropriative right holder is concerned that the applicant's proposed use will actually interfere with his right based on a flow measure (CFS), the burden shifts to the domestic user or senior appropriator as a protestant in the application proceedings to present evidence to support the allegation of interference and request denial of the permit or that flow (CFS) restrictions should be imposed on the permit when if the permit is issued. A similar burden of proof shift was discussed in *Lowrey* for considering beneficial use and waste relative to applications to use groundwater.¹³⁹

Evidence that a proposed use will interfere (and therefore conditions or limits should be imposed on a permit) necessarily involves information about difficult-to-predict future events, such as low flow from droughts. Accordingly, such evidence is subject to objection for being too speculative. If the protestant's proof is insufficient, the permit may be issued with only an AFY volume restriction without conditions or limits. After actual water use begins by the new appropriator, and when domestic users and senior appropriators are using water and actual flows can be

households is then multiplied by six to calculate the total acre-feet per year that should be subtracted from the estimated mean annual flow at the proposed point of diversion to reduce the amount of unappropriated water available.

137. See *supra* discussion at text accompanying note 126.

138. See *supra* discussion at text accompanying note 126.

139. See *supra* text accompanying note 64.

measured, an after-the-fact (after permit issuance) analysis can be made, following the principle enunciated by the Oklahoma Supreme Court in *Lowrey* for the use of groundwater.¹⁴⁰ To ensure that an appropriation permit holder has a continuing after-the-fact (post-permit issuance) obligation to avoid interference with domestic users and appropriative users after the appropriator's actual use begins, appropriation permits issued by the OWRB contain a provision that the permit and holder thereof are subject to domestic users and existing appropriators.¹⁴¹

There are valid reasons to wait until actual use of water begins before imposing conditions or restrictions on a new permit to limit or restrict appropriation diversions or rates of withdrawal from pumping groundwater that include a flow measure (CFS). Imposition of conditions or limits on use based on flow (CFS) not only requires the presentation of additional evidence at some expense of the parties, but also requires an additional administrative burden to properly analyze such evidence. Furthermore, additional administrative oversight and burden falls on the permit holder or the state agency to monitor flows to ensure compliance with the imposed conditions or limits. The initial installation of a stream flow gage by the United States Geological Survey may cost over \$25,000 with an annual maintenance cost of \$9,000.¹⁴² Simpler staff gages and flow weirs located in the stream are less costly to install and maintain, but require additional resources of the OWRB staff and efforts of the interested persons to monitor existing (real time) conditions that may trigger actions based on the limit or restriction imposed by the permit (e.g., cease all diversion pumping when flow gage shows flow falls below six CFS).

Until being repealed in 1972,¹⁴³ Oklahoma's appropriation laws provided authority for the appointment of watermasters for stream systems with the day-to-day field duties "to apportion, regulate and control the waters of the district as will prevent waste."¹⁴⁴ The watermaster program was never implemented in Oklahoma, but other more arid western states maintain active watermaster, headgate, and ditch rider laws to oversee water use on a real time basis.¹⁴⁵ Oklahoma statutes and rules of the Board now provide

140. *Lowrey v. Hodges*, 555 P.2d 1016 (Okla. 1976).

141. OKLA. ADMIN. CODE § 785:20-7-2(10) (2011).

142. See 2011 Joint Funding Agreement Between United States Geological Survey and Oklahoma Water Resources Board (on file with author).

143. 1972 Okla. Sess. Laws ch. 256, § 33.

144. 82 OKLA. STAT. § 72 (1971).

145. See, e.g., COLO. REV. STAT. § 37-84-112; NEV. REV. STAT. § 536.020 (2010); N.M. STAT. § 73-2-1 et seq. (2011); WYO. STAT. § 41-3-613 (2011).

ongoing water use oversight through required annual water use reporting by water right holders.¹⁴⁶

The imposition of CFS flow conditions and limits on permits after actual use of water is initiated can be the subject of administrative actions,¹⁴⁷ impairment of rights actions in district court,¹⁴⁸ or private causes of action for nuisance¹⁴⁹ as a method to address complaints of actual interference (not just potential interference) or allegations that conditions have changed¹⁵⁰ or that after-the-fact waste is occurring.

As consumptive¹⁵¹ water demands increase in Oklahoma,¹⁵² competition and controversies over the use of finite resources are bound to grow and lead to more before-the-fact (pre-permit issuance) protests and after-the-fact complaints of interference. Such protests and complaints may result in increased expectation of more stringent water management and oversight of use and more frequent imposition of conditions and limitations on water use based on CFS flow measurements and less reliance on the AFY volume measure as the primary limitation on use.

A shift toward more active water management and imposition of permit limits and conditions for water use based on CFS flow considerations may be hastened in Oklahoma by issues other than increased consumptive use

146. See 82 OKLA. STAT. § 1020 (2011); OKLA. ADMIN. CODE §§ 785:20-9-5, 785:30-5-9.

147. See 82 OKLA. STAT. § 1085.2(8) (2011).

148. See *id.* § 105.5. *But see* Heldermon v. Wright, 152 P.2d 855 (Okla. 2006) (remanding the case because the Attorney General was not given opportunity to intervene for the adjudication of rights to use water in the public interest).

149. See 50 OKLA. STAT. § 1 (2011). Whether the diversion of stream water or pumping of groundwater pursuant to a permit for crop irrigation constitutes an exempt agricultural activity as defined by section 1.1 or is an action done or maintained under express authority of a statute exempt by section 4 has not been addressed in a reported decision in Oklahoma.

150. See *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 1007 (Cal. 1935). The court recognized that “[w]hat is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time.”

151. The Glossary of Water Related Terms in *Water and Water Rights* defines “consumptive use” of water to mean use of water in a manner that makes it unavailable for use by others by absorption, evaporation, transpiration or incorporation into a manufactured product. 6 WATERS AND WATER RIGHTS 1310 (Robert E. Beck ed., 1991). “Nonconsumptive use” of water is defined to mean use of water with return to the stream or waterbody of substantially the same amount of water as withdrawn; thus, a use in which only insignificant amounts of water are lost. *Id.* at 1311. “Instream use” is defined to mean any use of water that does not require diversion or withdrawal from the natural watercourse. *Id.*

152. See *Qualification Settlement Agreement (QSA) Cases*, *supra* note 120, at 4 (estimating that demand will increase approximately 33% between 2010 and 2060, not considering potential decreases if more aggressive conservation measures are implemented as recommended).

demands and controversies. A significant issue addressed in the 2012 Update to the Oklahoma Comprehensive Water Plan is the suitability and structure of an instream/environmental flow (ISF) program for Oklahoma.¹⁵³ Several states have enacted ISF programs, and depending on the ISF program structure enacted, there can be varying impacts on water management activities in the state. The following section of this article describes the kinds of ISF programs that have been implemented and possible impacts on Oklahoma's water management laws, including beneficial use and waste, if such an ISF program is determined suitable for Oklahoma.

Beneficial Use, Nonconsumptive Use and Instream Flow Use

This article previously noted that Oklahoma statutes contain at least two non-exclusive lists of uses that can be considered "beneficial uses"¹⁵⁴ and the definition of "beneficial use" in rules of the OWRB¹⁵⁵ contains a non-exclusive list of uses described as beneficial uses. The following types of water "uses" are included within one of the statutory lists and the rule list: "recreational," "propagation of wildlife, fish and aquatic life," and "recreation, fish and wildlife." Such uses are often described as non-consumptive, but the more accurate description may be "instream flow" (ISF)¹⁵⁶ or "environmental flow"¹⁵⁷ use. Statutes in several other states acknowledge that such instream uses are considered beneficial,¹⁵⁸ but that has not always been the case.

Changes in the application of the beneficial use doctrine have been occurring throughout the West. New types of uses have been found to be beneficial and the manner by which water has been placed to beneficial use

153. In this context, "instream flow" is . . . defined as the quantity and timing of water flow required in a stream or river to sustain its freshwater ecosystem and the human livelihoods that depend on it." OKLA. WATER RES. BD., *Oklahoma Comprehensive Water Plan Supplemental Report, Instream Flow Issues & Recommendations* (Feb. 2011), available at http://www.owrb.ok.gov/supply/ocwp/pdf_ocwp/WaterPlanUpdate/draft_reports/OCWP_InstreamFlow_IssuesRecs.pdf.

154. 82 OKLA. STAT. §§ 1020.2(A), 1084.1 (1993).

155. OKLA. ADMIN. CODE §§ 785:20-1-2, 30-1-2 (2012).

156. *Id.*; see discussion *supra* note 136.

157. Texas water law uses the term "environmental flows" in legislation creating an environmental flows workgroup. See TEX. WATER CODE ANN. § 11.002(15)-(17) (West 2011).

158. Norman K. Johnson & Charles T. DuMars, *A Survey of the Evolution of Western Water Law in Response to Changing Economic and Public Interest Demands*, 29 NAT. RES. J. 347 (1989).

is under scrutiny. What once may have qualified as a beneficial use for a valid appropriation may now be seen as wasteful; and conversely, what once amounted to waste may now be seen as beneficial.¹⁵⁹ It wasn't long ago that water left to flow in the streambed was considered wasteful.¹⁶⁰ Now, complete dewatering results in violations of federal, state, or local laws.¹⁶¹ Change has come slowly to water policies and laws in the West as an increased strain on the existing water resources has taken place. In the past, water has been predominately appropriated in western states for agriculture use. But rural uses are declining and urban demands are on the rise. A significant shift has taken place in the federal government's role in western water resources as well. The days of federally-subsidized water supply projects are virtually over and federal interests have moved from water development projects toward substantive involvement in environmental flows. The passage of the Clean Water Act, the Endangered Species Act, and the National Wild and Scenic Rivers Act are examples of this shift. In a 1987 assessment report, the Bureau of Reclamation declared it had accomplished its original mission of helping to settle the West through federally subsidized water development and now it was time to pursue a mission based on resource management.¹⁶² Overalllocation of water resources in some places has occurred, leaving streams dewatered, causing harm to aquatic ecosystems, and affording no protection to recreational water uses or other instream uses. In response, the public is claiming a broader role in water resource management and has sought elevation of environmental and other instream flow uses to the level of beneficial use recognition.¹⁶³

159. Idaho Dep't of Parks v. Idaho Dep't of Water Admin., 530 P.2d 924, 931 (Idaho 1975) (“[T]he concept of what is or is not a beneficial use must necessarily change with changing conditions.”); Joseph L. Sax, *The Limits of Private Rights in Public Waters*, 19 ENVTL. L. 473, 478 (1989) (“When uses cease to be seen as beneficial, however longstanding, they are repudiated in favor of modern conceptions of beneficiality.”).

160. Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 281 (Colo. 1961).

161. See, e.g., Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1988); Clean Water Act, 33 U.S.C. §§ 1251-1387 (1987).

162. JOE HALL, BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, ASSESSMENT '87: A NEW DIRECTION FOR THE BUREAU OF RECLAMATION 1 (1987).

163. Joseph L. Sax, *The Public Trust Doctrine In Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970); Sarah B. Van de Wetering & Robert W. Adler, *New Directions In Western Water Law: Conflict or Collaboration?*, 20 J. LAND RESOURCES & ENVTL. L. 15, 18, 29 (2000).

Throughout the West, water is no longer viewed simply as a commodity to be diverted away from the river. The belief that water rights should only be given to those who need it for their livelihood has expanded and a novel meaning is being applied to the concept of beneficial use. “There is life and beauty in water. It is a valid use of water simply to allow it to remain in a stream or lake. . . . [S]ufficient water absolutely must be available to meet a broad range of public environmental, recreational, ecological, and aesthetic needs.”¹⁶⁴ The concept of what is a beneficial use must necessarily change with changing conditions; for example, today recreational use of water is seen as essential to human welfare and in need of protection from out of stream development. It is undoubtedly beneficial “to use water for beautifying parks and resorts where people may rest and enjoy themselves, and for forming pools and lakes for swimming, boating, fishing, and hunting”¹⁶⁵

In 1974, the Idaho Supreme Court stated:

[T]he legislature has declared that the “preservation of water in the area described for its scenic beauty and recreational purposes necessary and desirable for all citizens of the state . . . is hereby declared to be a beneficial use of such water”[which] would appear to indicate that the use of water for providing recreational and aesthetic pleasure represents an emerging recognition in this and other states of social values and benefits from the use of water.¹⁶⁶

Other instream flows are also being valued for ecological and aquatic protection, maintenance and improvement of water quality, and aesthetics, a view expressed in the State of Washington’s general declaration of fundamentals for utilization and management of state waters:

Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish,

164. Charles F. Wilkinson, *Western Water Law in Transition*, 56 U. COLO. L. REV. 317, 322 n.20 (1985) (“These conclusions are reflected in a number of modern movements, including the setting aside of large areas of land as wilderness. . . . the increased concern for the rights of animals. . . . the increased demand for recreational uses of water. . . . the provision in most western states for the establishment of instream, nonconsumptive water flows. . . . and the attention given to water issues . . .”).

165. Frank Trelease, *The Concept of Reasonable Beneficial Use in the Law of Surface Streams*, 12 WYO. L. J. 1, 11 (1957).

166. Idaho Dep’t of Parks v. Idaho Dep’t of Water Admin., 530 P.3d 924, 927-28 (Idaho 1937) (citing IDAHO CODE ANN. § 67-4307 (2012)).

scenic, aesthetic and other environmental values, and navigation values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which could conflict therewith shall be authorized only in those situations where it is clear that the overriding consideration of the public interest will be served.¹⁶⁷

Most western states have in fact enacted legislation recognizing instream uses of water for fish, wildlife, and recreation purposes.¹⁶⁸ Texas, Oregon, and Idaho specifically list recreation as a beneficial use for which an appropriation may be made.¹⁶⁹ In Utah, beneficial use now includes instream flows to enhance fisheries, natural stream habitats, and recreational purposes.¹⁷⁰

Whether Oklahoma's water quantity management laws should address ISF issues, and if so, the structure that should be considered to address the issues, is a specific subject intentionally analyzed as part of the 2012 Update to the Oklahoma Comprehensive Water Plan. The analysis of the ISF issue resulted in a priority recommendation for the 2012 Update to conduct more detailed studies before making specific proposals or suggestions to the Oklahoma Legislature. As part of the priority recommendation, the 2012 Update recognizes the following:

In 2006, 1.2 million residents and nonresidents in Oklahoma participated in some form of fish and wildlife-related recreation—all directly or indirectly dependent upon water. These anglers, hunters, and wildlife viewers spent \$1.3 billion in retail sales . . . creating \$696 million [in] salaries . . . and supporting 28,142 jobs. The total economic effect from fish and wild-life related recreation was estimated at \$2.3 billion. . . . As in many other western states that have grappled with instream flow protection, there remains no clear consensus in Oklahoma on the most appropriate way to balance consumptive and nonconsumptive needs for water. For this reason, stakeholder input and guidance from the recommended Regional Planning Groups could prove invaluable in striking an appropriate balance in each region's unique water needs. As part of this OCWP

167. WASH. REV. CODE ANN. § 90.54.020(3)(a) (West 2007).

168. Johnson & DuMars, *supra* note 158, at 361.

169. IDAHO CODE ANN. § 67-4301 (1925); OR. REV. STAT. § 536.300 (1985); TEX. WATER CODE ANN. § 11.023(a)(6)(2007).

170. UTAH CODE ANN. § 73-3-3(11) (West 2000 Supp.).

update process, an Instream Flow Workgroup was commissioned¹⁷¹

A threshold issue considered by the ISF Workgroup for the 2012 Update was whether an ISF program is suitable for Oklahoma. Although the ISF Workgroup made no final recommendation on the threshold issue of ISF program suitability, controversies such as that addressed in California involving consumptive use of water from Mono Lake¹⁷² and addressed in Texas involving endangered species and spring flow reduction and pumping from the Edwards Aquifer near San Antonio¹⁷³ were considered.¹⁷⁴

One possible structure for recognizing and protecting ISF adopted by other states and reviewed by the ISF Workgroup involves the issuance of appropriation rights for such use.¹⁷⁵ Oklahoma's existing appropriation law may accommodate such a permit structure by including "recreational," "propagation of wildlife, fish and aquatic life," and "recreation, fish and wildlife" in lists of "beneficial uses." Such accommodation exists to the extent that being a use included in a list of beneficial uses creates a presumption that the use is beneficial, regardless of the narrative language in the definition of "beneficial use" that creates an ad hoc test for quantity that includes "reasonable intelligence," "reasonable diligence" and economic necessity.

If an ISF use such as "recreation" is considered to be a beneficial use and an appropriation permit is issued in this program structure, a priority date established by such a permit may reduce the potential that future consumptive uses with junior priorities will interfere with the permitted ISF use. However, under Oklahoma's existing appropriation laws, senior appropriative consumptive users would not be affected by a junior priority ISF user, and senior consumptive use appropriators would not be required

171. OWRB EXECUTIVE REPORT, *supra* note 4, at 12.

172. *See Nat'l Audubon Soc'y v. Superior Ct. of Alpine Cnty.*, 658 P. 2d 709 (Cal. 1983) (recognizing that a 1940 appropriation right of the City of Los Angeles to divert water from Mono Lake was impressed with the "public trust" when issued and therefore a new restriction to curtail consumptive use based on public trust values to protect the lake level is authorized without a taking).

173. *Sierra Club v. Babbitt*, 995 F.2d 571 (5th Cir. 1993). The case ultimately led the State of Texas to create the Edwards Aquifer Authority to administer and limit groundwater pumping that can affect the flow of Comal Springs which pumping can result in a taking of an endangered species which is prohibited by the federal Endangered Species Act.

174. OKLA. WATER RES. BD., *supra* note 153.

175. COLO. REV. STAT. § 37-92-102(3) (2011).

retroactively to alter use schedules, diversion rates or release water from storage for the ISF use.

Even if an ISF use is considered to be a “beneficial use,” an impediment in existing Oklahoma appropriation law to issuing permits for ISF uses is the physical diversion requirement to appropriate. A physical diversion was recognized as an element of appropriation by the Oklahoma Supreme Court¹⁷⁶ and in the current Oklahoma appropriation statute by the requirement to provide publication notice of the permit application “in the county of the point of diversion.”¹⁷⁷

Historically, a physical diversion provided notice to others of the intent to obtain a water right and avoided speculation in water.¹⁷⁸ In other states, a diversion has been found to have occurred by an impoundment where water is considered to have been beneficially used in or on the reservoir, with the amount being set at the minimum water level needed for fishing and boating.¹⁷⁹ In what may be characterized as a hybrid situation, Colorado authorizes “recreational in-channel diversions” (RICDs) that are functionally equivalent to ISF rights in that they allow the appropriation of an amount of streamflow for use within the river channel,¹⁸⁰ but unlike ISF rights, RICDs require that the flow be “diverted, captured, controlled, and placed to beneficial use between specific points defined by control structures.”¹⁸¹ Further, RICD water rights are limited to the minimum amount of stream flow necessary to produce a “reasonable recreational experience.”¹⁸²

In any event, the once firmly held view that leaving flow in the river was wasteful has been overcome in most of the western states. Most have found that non-diversionary uses for environmental preservation and recreation constitute beneficial uses.¹⁸³ “If a prospective appropriator makes a beneficial use of water in its ‘natural state’ such beneficial use should serve as a basis for a valid appropriation.”¹⁸⁴

176. *See* *Gates v. Settlers Milling Canal & Reservoir Co.*, 91 P. 856 (Okla. 1907).

177. 82 OKLA. STAT. § 105.11(A) (2011).

178. *In re* Application A-16642, 463 N.W.2d 591, 601 (Neb. 1990); Christine A. Klein, *The Constitutional Mythology of Western Water Law*, 14 VA. ENVTL. L.J. 343, 344 (1994-1995); Johnson & DuMars, *supra* note 158.

179. *Harkey v. Smith*, 247 P. 550 (N.M. 1926); MacPherson, Stacy & Vines, *supra* note 72, at 214.

180. COLO. REV. STAT. § 37-92-103(10.3) (2011).

181. *Id.*

182. *Id.*

183. Klein, *supra* note 178, at 344; *see also* Wilkinson, *supra* note 164, at 334.

184. *See* MacPherson, Stacy & Vines, *supra* note 72, at 217.

The Supreme Court in Nevada upheld the State Engineer's ruling approving an application to appropriate the waters of a lake for public recreation and fishery purposes. The Court rejected the argument that non-diversionary appropriative water rights are contrary to the public interest and found that "Nevada water law recognizes and permits water appropriation *in situ*, without a diversion, for public recreation purposes."¹⁸⁵

If the physical diversion requirement is removed as an obstacle in Oklahoma, another issue to consider relative to an ISF program structure that allows appropriation rights for ISF is whether there should be a limitation on who may qualify as an applicant. Legislation in some western states provides that members of the public cannot hold ISF water rights.¹⁸⁶ Instead, the applicant qualification is confined to state agencies or other public entities to avoid speculation in water rights.¹⁸⁷ Reasons for such concern relate to complexity and expertise needed to quantify the right initially and that once the permit is issued, immediate and full use could be shown to avoid any reduction or cancellation by forfeiture in the future. In Utah, the Division of Wildlife Resources and State Parks may hold instream flow rights.¹⁸⁸ In Idaho, the appropriation may only be made by the governor.¹⁸⁹ In Colorado, only the Colorado Water Conservation Board can hold ISF rights¹⁹⁰ and only specified public entities can hold recreational in-channel diversion rights (RICDs).¹⁹¹

In lieu of a law authorizing the issuance of an appropriation permit for ISF use, another ISF program structure that can be considered relates to the determination of water availability for appropriation. Oklahoma appropriation law requires the OWRB to determine whether there is "unappropriated water available in the amount applied for"¹⁹² before an appropriation permit can be issued. Montana and Alaska statutes provide that the state or federal agencies can request a reservation of minimum

185. *State v. Morros*, 766 P.2d 263, 267 (Nev. 1988).

186. WYO. CONST. art. 8, § 1 (2008); DAVID M. GILLILAN & THOMAS C. BROWN, *INSTREAM FLOW PROTECTION: SEEKING A BALANCE IN WESTERN WATER USE* 121-22 (1977); Macpherson, Stacy & Vines, *supra* note 72, at 213; Steven J. Shupe & Lawrence J. MacDonnell, *Recognizing the Value of In-Place Uses of Water in the West: An Introduction to the Laws, Strategies and Issues*, in *INSTREAM FLOW PROTECTION IN THE WEST* 1-10 (Lawrence J. MacDonnell ed., 1993).

187. Klein, *supra* note 178, at 352.

188. UTAH CODE ANN. § 73-3-3(11) (West Supp. 2000).

189. IDAHO CODE ANN. § 67-4301 (1925).

190. COLO. REV. STAT. § 37-92-102(3) (2011).

191. *Id.* § 37-92-103(10.3).

192. 82 OKLA. STAT. § 105.12(A)(1) (2011).

flows from appropriation instead of obtaining an appropriation right.¹⁹³ As explained previously in this article, the OWRB rules provide that mean annual flow information (resulting in an AFY measure) is typically used in the calculation of water availability.¹⁹⁴ Adding authority for flow reservations would necessarily shift the focus of the current availability analysis to a flow measure (CFS).

Other possible ISF program structures or components of structures include reliance on a “public interest” consideration before an appropriation permit is issued. Oregon and Wyoming appropriation laws include a public interest component whereby the effect of the proposed application on stream flows and values of leaving water in the stream can result in denial of the appropriation or conditioning the appropriation to protect the minimum flows.¹⁹⁵ Since before statehood until 1963, Oklahoma’s appropriation law provided that an application to appropriate could be rejected if “the approval thereof would be contrary to the public interest.”¹⁹⁶ No such public interest consideration is part of current Oklahoma appropriation law and therefore would have to be added by legislation for the OWRB to rely on the public interest component to protect ISF.

An existing program in Oklahoma is the Scenic Rivers Act¹⁹⁷ which provides for the free flowing condition of the six designated scenic rivers and a prohibition against damming a scenic river.¹⁹⁸ In response to concerns about the appropriation diversion of the Baron Fork Creek scenic river, the OWRB promulgated a rule to restrict diversions from that stream when the flow at a designated stream gage maintained by the USGS falls below 50 CFS.¹⁹⁹ Lastly, an ISF program structure considered by the ISF Workgroup for the 2012 Update was the reliance on the “domestic use set aside” set forth in OWRB rule.²⁰⁰ Further analysis of the domestic use set aside program is necessary because the rule provides that the presumed domestic use is measured in AFY and actual real time use by riparian domestic landowners may impact flows measured in CFS.

193. See, e.g., ALASKA STAT. § 46.15.145 (2011); MONT. CODE ANN. § 85-2-316 (2011).

194. See discussion *supra* note 128.

195. OR. REV. STAT. § 536.410 (1963); WYO. STAT. ANN. § 41-4-503 (1977).

196. OKLA. TERR. LAWS 281-82; see 82 OKLA. STAT. § 25 (1961), *amended by* 1963 Okla. Sess. Laws 272.

197. 82 OKLA. STAT. §§ 1451- 1471 (2011).

198. *Id.* § 1453(B).

199. OKLA. ADMIN. CODE § 785:20-7-3.1 (2003).

200. *Id.* § 785:20-5-5(a)(2).

If the priority recommendation on Instream/Environmental Flows in the 2012 Update of the Oklahoma Comprehensive Water Plan²⁰¹ is implemented by the Oklahoma Legislature and the resulting study concludes that an ISF program is suitable for Oklahoma, the study should also consider the potential effects of the various ISF program structures on existing appropriation rights and existing rights to take and use water as well as future appropriations.

For instance, retroactive implementation of flow reservations may not affect the volume (AFY) authorized to be diverted by existing appropriators, but could result in imposition of pumping limits based on stream flow. Such flow restrictions and limits based on CFS flow could require corresponding expensive gaging and monitoring requirements to confirm compliance with any new flow restrictions, with concomitant costly administrative oversight of monitoring and compliance review.

An ISF program recommendation that provides for a release of water from a storage facility (lake or pond) owned by an appropriator (or for which the appropriator contracts for use of the storage) to maintain ISF downstream from the storage facility, or that suggests the retroactive implementation of a lake level management plan that reduces water availability for consumptive use from storage, may certainly be met with assertions of taking of vested rights to the storage.²⁰²

Similarly, an ISF program structure that authorizes the issuance of appropriation permits for ISF could result in making a significant amount of water unavailable for further appropriation at upstream locations, which can have two significant effects. Future appropriators may have to consider a diversion point located downstream from the segment protected by the ISF permit to avoid interference with the ISF use. Alternatively, the future appropriator may have to consider the construction of storage or enlargement of existing storage to ensure water is available for use at the time when direct diversions from the stream must cease to avoid interference with a downstream senior ISF water right.

201. See OWRB EXECUTIVE REPORT, *supra* note 4, at 12.

202. See 82 OKLA. STAT. § 105.21 (recognizing the necessity to pay compensation for use of storage by providing “[t]hat the owner of any works for the storage, diversion or carriage of water, which contain water in excess of his needs for . . . beneficial use for which it has been appropriated shall be required to deliver such surplus, at reasonable rates for storage or carriage, or both . . . to the parties entitled to the use of the water for beneficial purposes”). Failure to deliver the surplus water “at reasonable rates as determined by the [Oklahoma Water Resources] Board” may result in injunction relief compelling delivery. *Id.*