Protecting the Ogallala Aquifer in Kansas from Depletion: The Teaching Perpspective

by

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Originally published in JOURNAL OF LAND, RESOURCES, AND ENVIRONMENTAL LAW
24 J. LAND RESOURCES & ENVTL L. 349 (2004)

Protecting the Ogallala Aquifer in Kansas from Depletion: The Teaching Perspective[1]

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When I first started teaching water law, I visited water users in Western Kansas and learned of their problems in obtaining and maintaining groundwater rights from the Ogallala Aquifer. Then I began to hear criticism from people outside Western Kansas: "Don't grow corn and soybeans where only wheat should grow." "Shut down irrigators and beef packing plants." "Conserve groundwater for future generations." "Establish a Buffalo Commons."[2] The questions of whether curtailing existing water rights to achieve safe yield would amount to a "taking," how to preserve the Ogallala Aquifer,[3] and whether to preserve the Aquifer for future generations have been excellent issues for classroom discussion.

Eastern Kansas has rains and rivers. Western Kansas has the Ogallala Aquifer. Western Kansas is sparsely populated. Agriculture dominates the economy. Large-scale irrigation, cattle feed yards, and beef processing plants are vital industries. An influx of immigrant workers has changed the racial, nationality, and ethnic mix of southwest Kansas cities.

Originally, Kansas followed the riparian doctrine for streams and the absolute ownership doctrine for groundwater. With the 1945 Water Appropriation Act,[4] the Kansas legislature changed to the appropriation doctrine for both streams and groundwater. It protected existing rights with "vested rights" for water already being used. In 1957, following Professor Shurtz's recommendations that the appropriative water rights needed legislative protections, the legislature amended the Act to state expressly that water rights are "real property right[s], appurtenant to . . . the land on or in connection with which the water is used."[5]

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[1] The subject of this essay is a variation on, and essentially a modified version of, a paper given in Kyoto, Japan in March 2003 at the 3rd World Water Forum. *See* John C. Peck, *Property Rights in Groundwater—Some Lessons from the Kansas Experience*, 12 KAN. J.L. & PUB POL'Y 493 (Spring 2003).

[2] Deborah Epstein Popper & Frank J. Popper, *The Great Plains: From Dust to Dust*, PLANNING MAGAZINE, Dec. 1987, ¶¶ 40–41, *available at* http://www.planning.org/25anniversary/planning/1987dec.htm (last visited Apr. 14, 2004).

[3] For some modest proposals toward that end, *see* Peck, *supra* note 1, at 509.

[4] KAN. STAT. ANN. § 82a-701 (1997).

[5] *Id.*at § 82a-701(g). The Act did say, however, that an appropriation "shall not constitute ownership of such water." *Id.* § 82a-707(a). *See* Frank J. Trelease, *Policies for Water Law: Property Rights, Economic Forces, and Public Regulation*, 5 NAT. RES. J. 1, 23 (1965) ("A person or firm with a need for water needs the assurance that a continuing supply will be forthcoming. Without such assurance, entrepreneurs will not

The Division of Water Resources (DWR) granted numerous irrigation permits during the 50s and 60s, despite the Act's express protection against granting new permits that would impair existing water rights or adversely affect the public interest. Legislative concern in the late 60s led to the enactment of the 1972 Groundwater Management District (GMD) Act.[6] The three GMDs in Western Kansas adopted regulations that attempted to control the rate of aquifer depletion, but these regulations did not affect then-existing water rights.

The GMD Act further provided for the creation of Intensive Groundwater Use Control Areas (IGUCAs)[7] in locations where groundwater mining had become a serious local problem. The GMD Act gives the Chief Engineer extraordinary powers to curtail pumping on all existing water rights in the IGUCA,[8] despite the Appropriation Act's designation of water rights as property rights and its method of administering rights on a date priority basis.

The constitutionality of this section of the GMD Act has not been tested in a Kansas appellate court, although one IGUCA designation created such an opportunity. In 1992, the Chief Engineer established the Walnut Creek IGUCA (the Order) to stop over 700 junior irrigation rights from impairing two state-owned senior surface water rights that the Kansas Department of Parks and Wildlife (KDPW) used to enhance the Cheyenne Bottoms Wildlife Area.[9] The Order created two classes of water rights—"senior rights" and "junior rights"—before and after October 1, 1965. The Order cut senior rights from eighteen inches of water to between twelve and fourteen inches per year[10] and junior rights to between four and six inches.[11]

The bases of the IGUCA curtailment were that farmers should employ efficient, non-wasteful water practices; that "[t]he reasonable average annual amount of water needed . . . for irrigation" in this area is only twelve to fourteen inches;[12] and that the aquifer in this basin should be administered on a safe yield basis. The Order adversely affected all water rights junior to the senior KDWP rights. A constitutional "takings" claim, if there was one, could possibly have been made by the senior-most holders of junior rights. Their claim would be that the Order should have totally curtailed rights more junior in time before it curtailed theirs at all. After appealing the IGUCA Order to the

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risk capital and labor in business doomed to failure in case the water supply is cut off.").

[6] KAN. STAT. ANN § 82a-1021.

[7] *Id.*at § 82a-1038.

[8] *See id.*

[9] Kansas Division of Water Resources, Order, In the Matter of the Designation of an Intensive Groundwater Use Control Area in Barton, Rush and Ness Counties, Kansas 104–115 (Jan. 29, 1992) (on file with author and journal).

[10] *Id.* at 109.

[11] *Id.*

[12] *Id.* at 102. *See also* Myrl L. Duncan, *High Noon on the Ogallala Aquifer: Agriculture Does Not Live by Farmland Preservation Alone*, 27 WASHBURN L.J. 16, 76 (1987) (interpreting the Act to empower the Chief Engineer "to adjust existing rights when they are not being used to benefit the public interest").

district court, the irrigators abandoned their appeal, leaving Kansas without an appellate takings case.

A problem with recent Kansas proposals to solve the larger groundwater mining problem is not knowing how Kansas courts would rule on the takings issue—the issue of the strength of a Kansas water right *qua* a real property right, despite the Act's defined term. In 1963, the Kansas Supreme Court upheld the power of the legislature to take unused water rights without compensation when the court ruled on the constitutionality of the1945 Act's change from the common law doctrine to the prior appropriation doctrine.[13] And the 1992 Walnut Creek IGUCA case illustrates an unchallenged administrative order cutting back on water rights. But the court expressly rejected the Public Trust Doctrine in a 1990 case[14] involving water but not water rights. Any case or aquifer sustainability effort arising today would have to factor in more recent non-Kansas court decisions.[15]

In my water law class over the years, this issue of the state's legal power to cut back on existing water rights without compensation has always produced good discussion and debate. While the IGUCA case can be seen as primarily a legal case, based on seniority of rights, the Order's adoption of basin-wide safe yield implies the intent to preserve water for future generations. For my classes, the ethical question of inter-generational equity and fairness has become just as interesting as the legal question, although obviously less class time can be devoted to the ethical issue. The ethical question of imposing safe yield is intriguing no matter which way one resolves the legal question—if no compensation is required, the water user suffers the immediate economic loss; if compensation is required, the taxpayer loses; in either case, forced curtailments will cause someone to suffer and sacrifice for the future.[16] How should our generation respond to the following question: To what extent should we preserve Kansas groundwater resources for future generations? Conversely, if it were possible to inquire of future generations, how should they respond to the following question: To what extent should the earlier generation (that is, our generation) be permitted to use that water and not preserve it for us, the future generation?

My classes have typically had a nice mix of natural partisans representing rural and environmental interests. The rural students do not want irrigation rights taken, but if so, they naturally want compensation. Environmentalist students argue police powers and see little wrong with shutting down irrigators

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[13] *See* Williams v. Wichita, 374 P.2d 578 (Kan. 1962).

[14] State *ex rel.* Meek v. Hayes, 785 P.2d 1356 (Kan. 1990).

[15] *See, e.g., Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313 (2001) (awarding compensation to water districts from the U.S. for water curtailments ordered to protect fish under the Endangered Species Act).

[16] For detail on the economic issues, *see, e.g.*, Trelease, *supra* note 5; E.S. Bagley, *Some Economic Considerations in Water Use Policy*, 5 U. KAN. L. REV. 499 (1957); Edgar S. Bagley, *Water Rights Law and Public Policies Relating to Ground Water "Mining" in the Southwestern States*, 4 J.L. & ECON. 144 (1961).

without compensation. They claim that farmers have already taken their share of the water, that courts should interpret the term "impairment" to include not only direct impairment of a neighbor but also a slow lowering of the overall water table, and that the Public Trust Doctrine should be applied in Kansas. The ruralists counter that "it's easy to conserve *someone else's* property for future generations." They ask those students who promote taking the water rights whether they personally feel strongly enough about the issue to be willing to sacrifice present purchases and to have their own state income taxes increased sufficiently to buy out the holders of water rights if a court determined that substantial cutbacks of groundwater pumping amounted to a taking. Few environmentalist students agree that aquifer sustainability is that important to them.

The environmentalist students point to the strong ethic of preserving water for future generations made by Aldo Leopold[17] and many others,[18] as well as reservation of public parks and forests with the welfare of future generations in mind.[19] The rural students counter that the federal government has typically created parks by reserving land already in the public domain.[20] If Kansas had wanted to adopt a safe yield policy—in effect to make the Ogallala Aquifer akin to a park preserved for future generations—it should have done so in 1945. DWR would have granted far fewer permits than it has done had safe yield been state policy, and fewer permits would thus have been perfected into full-fledged water rights, expressly defined in the Act as "real property interests." The economy of western Kansas in that case would have been much different than it is today.

In classroom discussions on inter-generational equity, several ethical models come into play, such as: The Golden Rule—"Do unto others as you would have them do unto you.";[21] Frankl's rule of logotherapy—"Live as if you were living already for the second time and as if you had acted the first time as wrongly as you are about to act now!";[22] Kant's categorical imperative—"Act only on that maxim whereby thou canst at the same time will that it should become a universal law";[23] Rawls' principle—"[T]he correct

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[17] "A land ethic . . . cannot prevent the alteration, management, and use of 'resources,' but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state." ALDO LEOPOLD, A SAND COUNTY ALMANAC 240 (1966). My colleague, George Coggins, argues, *inter alia*, for the common law of life tenancy, that life tenants must leave the property as they found it.

[18] *See* Peck,, *supra* note 1, at 507 nn.105, 114, 118; ROBERT L. GLICKSMAN ET AL., ENVIRONMENTAL PROTECTION, LAW AND POLICY 38–46, 63–66 (4th ed., 2003).

[19] *See* Peck, *supra* note 1, at 507 nn.109–114.

[20] When the federal government has sought to preserve other property, it has sometimes recognized the responsibility to reimburse property owners—for example holders of water rights adversely affected by the designation of scenic rivers in the Wild and Scenic Rivers Act. 16 U.S.C. § 1284(b) (2000).

[21] *Matthew* 7:12.

[22] VIKTOR E. FRANKL, MAN'S SEARCH FOR MEANING 173 (Wash. Square Press, 12th ed. 1968) (1946).

[23] Immanuel Kant, *Fundamental Principles of the Metaphysic of Morals*, *in* 42 GREAT BOOKS OF THE WESTERN WORLD 262 (1952), at 268.

principle is that which the members of any generation (and so all generations) would adopt as the one their generation is to follow and as the principle they would want preceding generations to have followed (and later generations to follow), no matter how far back (or forward) in time";[24] and even the simple solution to the problem of dividing a piece of pie.[25]

My rural students argue that application of these and other models[26] does not lead to a clear-cut ethical decision on the issue of preserving the aquifer for future generations. They say that one must apply these models not only to our generation looking forward, but also to the future generation looking backward. They ask: Would not a member of a future generation, at a hypothetical negotiating table or a theoretical discussion with us, have to respect our current position, the difficulty we are in precisely because we unknowingly set up a system of property rights that needed protection and then later found we had overtaxed that resource? By analogy, would it be fair for the present generation, looking backward, to insist on even more reservations than the National Parks system, to insist that the federal government now take back land outside the current federal lands without compensation, such as the Great Plains area because it should never have permitted it to be homesteaded in the first place?

My rural students point out an irony that while some call for cutting back groundwater pumping to save the groundwater for future generations, population declines are occurring in the Great Plains already.[27] Perhaps an equally important question to ask, besides how and whether to preserve the Ogallala Aquifer, is how to retain people living over the Kansas portion of the Ogallala to have someone to use the water that would be preserved for future generations. If no one is there to use the water, will it just remain sitting idle? Hardly, they say: future generations of Denverites or Kansas Citians would likely be the users of this water, preserved against the will of many Kansans of the current generation.

So, Kansas has an immense problem: current holders of water rights in western Kansas and the people employed by the water right holders are making

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[24] JOHN RAWLS, POLITICAL LIBERALISM 274 (1996).

[25] Let one child divide the piece of pie into two pieces, and let the other child choose which piece to take.

[26] Others include: Rawls' "veil of ignorance" and "original position," JOHN RAWLS, A THEORY OF JUSTICE 136–137 (1971); that model modified to create a meeting "at which all generations are represented," B. Barry, *Justice Between Generations*, *in* LAW, MORALITY, AND SOCIETY: ESSAYS IN HONOR OF H.L.A. HART 268, 280 (1977); the method of "final offer salary arbitration" (arbitrator selects one or the other of the participant's positions and cannot split the difference, which tends to brings the positions more closely together); and the Native American phrase "in order to understand me, walk a mile in my moccasins." *See also* DEREK PARFIT, REASONS AND PERSONS (1984), at 378, 381, 397; Peck, *supra* note 1, at 507 n.118 (citations omitted).

[27] Gary D. Willson, *The Great Plains*, *in* OUR LIVING RESOURCES: A REPORT TO THE NATION ON THE DISTRIBUTION, ABUNDANCE, AND HEALTH OF U.S. PLANTS, ANIMALS, AND ECOSYSTEMS 295, 305 (E.T. LaRoe et al. eds., 1995), *available at* http://biology.usgs.gov/s+t/pdf/Plains.pdf (last visited Apr. 14, 2004); Dennis Canchon, *Big Cities Lure Away North Dakota Youth*, USA TODAY, Feb. 24, 2004, at 1A, 2A.

a living, adding value to the economy, and depending on a legal system to protect their property rights and their expectations, but, in doing so, they are using up the Ogallala Aquifer. Future generations of people will also need water, jobs, and a strong economy. My students would typically conclude that fairness dictates some respect for the needs of future generations, but that we must likewise respect the rights and expectations of the present generation. My students attempt to harmonize the legal "takings" question with the inter-generational "fairness" question. A plausible approach might include three aspects: (1) strictly enforce rules requiring efficient use and prohibiting waste; (2) phase in safe yield over time to lessen the economic impact and the chance of a successful constitutional takings claim; and (3) consider changing the rules for the amount the government should pay when compensating for condemning or otherwise taking water rights—from market value to the amount of money the right holder has invested in land and equipment, considering capital depreciation.[28] In any case, these legal and fairness issues will continue to interest my students.

[28] *See, e.g.*, OR. REV. STAT. § 537.390 (2003) (providing a statutory limitation in acquisition of water rights to a value no more than "the actual cost to the owner of perfecting them") This statute "is limited to cases in which the 'property used in connection' with the water right is also acquired and is evidently of primary importance in public acquisition of hydroelectric plants." Corwin W. Johnson, *Condemnation of Water Rights*, 46 TEX. L. REV. 1054, 1094 (1968).