

2009

Fight for Your Right: Nebraska's Bifurcated Water Rights System Leads to Disputes over Appropriation Determinations. *Upper Big Blue Natural Resources District v. State Department of Natural Resources*

Chelsea R. Mitchell

Follow this and additional works at: <http://scholarship.law.missouri.edu/jesl>



Part of the [Environmental Law Commons](#)

Recommended Citation

Chelsea R. Mitchell, *Fight for Your Right: Nebraska's Bifurcated Water Rights System Leads to Disputes over Appropriation Determinations. Upper Big Blue Natural Resources District v. State Department of Natural Resources*, 17 Mo. Envtl. L. & Pol'y Rev. 155 (2009)
Available at: <http://scholarship.law.missouri.edu/jesl/vol17/iss1/6>

This Note is brought to you for free and open access by University of Missouri School of Law Scholarship Repository. It has been accepted for inclusion in Journal of Environmental and Sustainability Law by an authorized administrator of University of Missouri School of Law Scholarship Repository.

Fight for Your Right: Nebraska's Bifurcated Water Rights System Leads to Disputes over Appropriation Determinations

*Upper Big Blue Natural Resources District v. State Department of Natural Resources*¹

I. INTRODUCTION

It has been said that whiskey is for drinking and water is for fighting over.² Considering an estimated forty-nine percent of the American population depends on groundwater for its drinking water supply,³ fights over groundwater are guaranteed to be particularly nasty.

A Nebraska Natural Resource District took on the Nebraska Department of Natural Resources to duke it out over the permissibility of the inclusion of groundwater sources in water appropriation right determinations.⁴ The Department of Natural Resources (hereinafter "DNR") considered groundwater hydrologically connected to surface waters located in a different geographic area when making appropriation determinations, a reliance that the Resource District contended to be

¹ 756 N.W.2d 145 (Neb. 2008).

² This quote has been most commonly been attributed to Mark Twain, although it has not been verified. Mark Twain Quotations, Water, <http://www.twainquotes.com/Water.html> (last visited Jan. 4, 2010). Both Texas and California boast the phrase as being rooted in their respective states. See John M. Sharp, Jr., Univ. of Tex., The Edwards Aquifer: Will There be Water for Texas?, Outreach Lecture Series – Volume 20 (Oct. 18, 2002), available at

http://www.esi.utexas.edu/outreach/ols/lectures/Sharp/ppt/Sharp_Edwards_files/frame.htm; Green Works Radio Environmental Reporter, Whiskey is for Drinking, <http://www.greenworks.tv/radio/todaystory/20020720.htm> (last visited Jan. 4, 2010).

³ Texas Groundwater Protection Committee, Groundwater as Drinking Water, <http://www.tgpc.state.tx.us/DrinkingWater.htm> (last visited Jan. 4, 2010). This estimate was provided by the National Ground Water Association (hereinafter "NGWA"). *Id.* NGWA "is dedicated to advancing groundwater knowledge. NGWA's vision is to be the leading groundwater association that advocates the responsible development, management, and use of water." National Ground Water Association, General, <http://www.ngwa.org/> (last visited Jan. 4, 2010).

⁴ See *Upper Big Blue*, 756 N.W.2d 145.

FIGHT FOR YOUR RIGHT

unlawful and based on an impermissibly absent legislative direction.⁵ The gloves came off when the Department took a swing at the court, claiming a lack of jurisdiction.⁶ After three rounds, the Nebraska Supreme Court called the bout in favor of the Department's appropriation determinations and affirmed its authority to judge the fight.⁷

II. FACTS AND HOLDING

Two doctrines govern water rights: riparian and prior appropriation, hereinafter "appropriation."⁸ Under the appropriation doctrine, water and water sources may not be owned by any one entity, despite ownership of adjacent or flanking lands.⁹ However, individuals may take advantage of the principle "first in time, first in right" as applied to water and water source usage.¹⁰ According to this maxim, whoever utilizes the water first, acquires priority access to the use of that water above any subsequent user.¹¹ To establish rights over the water, the first user must harness or divert the water source for a beneficial purpose.¹² For example, one may divert water from a river or stream to irrigate farmlands, or may control the flow of water by building a dam.¹³ In doing so, the actor has engaged in appropriation.

⁵ *Id.* at 147.

⁶ *See id.* at 148.

⁷ *Id.* at 151-52.

⁸ Of the two water rights theories, eastern states in the U.S. tend to follow the riparian doctrine, while states in the west apply the prior appropriation doctrine. GUARDIANSHIP COUNCIL, FRESHWATER SOC'Y, WATER APPROPRIATION SYSTEMS AND STATE PROGRAMS 1 (2007), available at <http://www.freshwater.org/images/stories/PDFs/critical-water/waterappropriationsystemsandstateprograms.pdf>. Nine states employ a hybrid-system: Nebraska, California, Kansas, North and South Dakota, Oklahoma, Oregon, Texas and Washington. *Id.* Under the hybrid systems, both riparian and appropriation rights are recognized under given circumstances. *Id.*

⁹ Anne J. Castle, *Water Rights Law – Prior Appropriation*, FINDLAW, Jan. 1, 1999, <http://library.findlaw.com/1999/Jan/1/241492.html>.

¹⁰ *Id.* (internal quotations omitted).

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

The state of Nebraska has formally adopted the appropriation doctrine with respect to surface waters located within the state.¹⁴ Nebraska courts have said, “the term ‘surface water’ encompasses all waters found on the earth’s surface.”¹⁵ Appropriation becomes more complicated when dealing with groundwater,¹⁶ or unseen waters located under the surface.¹⁷ In Nebraska, groundwater is most commonly found stored in the spaces between rocks and in crevasses deep within the ground, called aquifers, although groundwater may also take the form of underground lakes and rivers.¹⁸ Nebraska laws specifically define groundwater as “that water which occurs or moves, seeps, filters, or percolates through the ground under the surface of the land.”¹⁹ Groundwater within the state is subject to the riparian doctrine.²⁰

¹⁴ Matthew N. Miller, *Spear T. Ranch v. Knaub and the Pitfalls of Litigious Water Management*, 60 ARK. L. REV. 591, 606-07 (2007).

¹⁵ *Spear T Ranch v. Knaub*, 691 N.W.2d 116, 125 (Neb. 2005) (citing RICHARD S. HARNSBERGER & NORMAN W. THORSON, *NEBRASKA WATER LAW & ADMINISTRATION* § 1.04, at 9-10 (1984)).

¹⁶ Interestingly, groundwater played a significant and unexpected role in the development of America’s railways. *See* Groundwater, <http://blank005.tripod.com/geology/groundwater.html> (last visited Oct. 30, 2009). Locomotives relied on hydropower, drawing water from groundwater sources. *Id.*

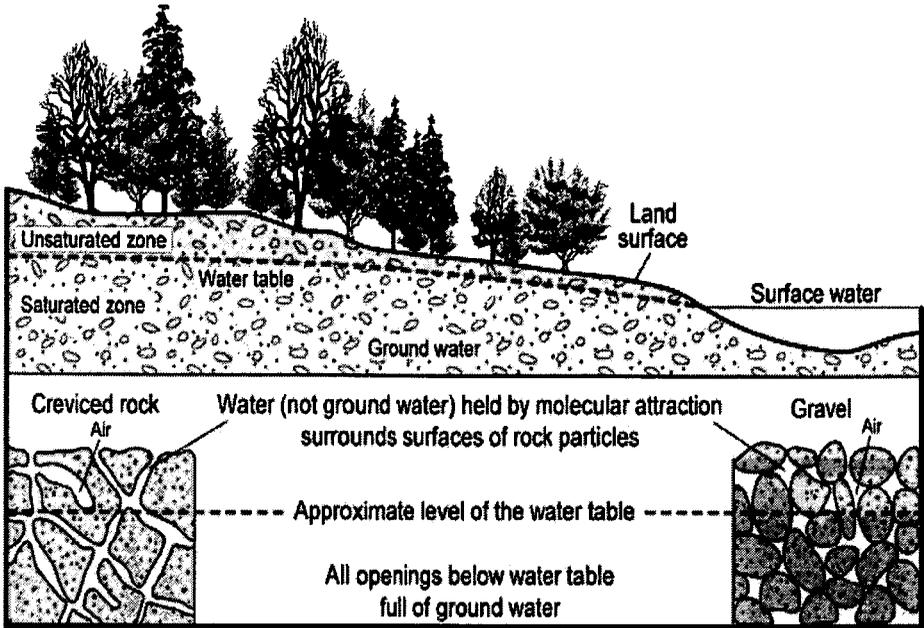
¹⁷ *See id.*

¹⁸ University of Nebraska-Lincoln, *What is Ground Water?*, <http://water.unl.edu/whatisgroundwater> (last visited Oct. 30, 2009). Nebraska utilizes a hybrid system, incorporating both prior appropriation and riparian concepts into its water laws. GUARDIANSHIP COUNCIL, *supra* note 8, at 1. The federal government has the authority to control water usage and rights, but has deferred to the states on the issue since 1877 with the passage of the Desert Land Act. ENVTL. PARTNERS, *STATE WATER LAWS* 14 (2001), available at <http://www.environmentalpartners.net> (follow the “State Water Laws” hyperlink; then open “Ch 3 StateWater-2.doc”).

¹⁹ NEB. REV. STAT. § 46-635 (Reissue 2004).

²⁰ Miller, *supra* note 14, at 610 (citing *In re Application A-16642*, 463 N.W.2d 591, 603 (Neb. 1990)).

FIGHT FOR YOUR RIGHT



Source: *Ground Water*, USGS General Interest Publication, 1999 (www.usgs.gov).

Nebraska's Department of Natural Resources is charged with making appropriation determinations within that state under the Nebraska Ground Water Management and Protection Act (hereinafter "Act").²¹ Acting under this authority, DNR made a preliminary determination on December 30, 2005 as to the appropriation of the Upper Platte River Basin.²² In so doing, DNR included a portion of groundwater located within the Big Blue River Basin. DNR determined that the Big Blue groundwater was hydrologically connected to the waters of the Upper Platte, serving as the basis for the inclusion.²³

Pursuant to required administrative procedures, DNR held public hearings following the preliminary determination that the Upper Platte

²¹ *Upper Big Blue Natural Res. Dist. v. State Dep't of Natural Res.*, 756 N.W.2d 145, 147 (Neb. 2008).

²² *Id.*

²³ *Id.*

River Basin was fully appropriated.²⁴ Four months later, DNR rendered a final determination, again including a portion of the Big Blue River Basin to be connected to the Upper Platte River Basin, in the appropriation determination.²⁵

The inclusion of groundwater located within the Big Blue River Basin prompted the Upper Big Blue Natural Resources District (hereinafter “the District”) to file suit against DNR.²⁶ First, the District sought an injunction preventing the inclusion of the Big Blue groundwater in the appropriation determination of the Upper Platte River Basin.²⁷ The District alleged that DNR exceeded the scope of its authority by considering two different geographic regions in this determination.²⁸ Second, the District brought a claim under the Administrative Procedure Act (hereinafter “APA”), on the basis that DNR again exceeded its authority when it enacted title 457, section 24-001.02 of the Nebraska Administrative Code.²⁹

At trial, the district court ruled against the District and in favor of DNR on both counts.³⁰ The district court found that DNR did not exceed statutory authority when promulgating the aforementioned rules, nor when including the groundwater located within the Big Blue Basin in appropriation determinations.³¹ On appeal, the Nebraska Supreme Court allowed the District to bypass the court of appeals, proceeding directly to the state’s supreme court.³² The court granted both the District’s petition to review the findings of the district court, and also DNR’s petition for review of the district court’s alleged lack of jurisdiction under the APA.³³

Accordingly, the Nebraska Supreme Court held that under the Act, DNR is permitted to consider a geographic area located in one river basin

²⁴ *Id.*

²⁵ *Id.* at 147.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

FIGHT FOR YOUR RIGHT

that is hydrologically connected to a second basin when determining that a second basin is fully appropriated.³⁴ Furthermore, the court affirmed its jurisdiction on the basis that the lower court had jurisdiction to hear the case in the first place, and the case was appropriately before the Nebraska Supreme Court on appeal.³⁵

III. LEGAL BACKGROUND

A. *Legislation and Regulations*

The Act authorizes DNR to make determinations as to the appropriation of waters within the state of Nebraska.³⁶ Under the Act, DNR is directed to evaluate subterranean water supplies hydrologically connected to surface waters.³⁷ This evaluation is required to include projections as to the long-term availability of the groundwater supplies, as well as the uses of those waters in each of the state's river basins.³⁸ Specifically, for each river basin or sub-basin considered, the report must detail (1) "the nature and extent of use" of the surface and groundwater, (2) the physical location and parameters considered in determining the hydrological connection and the criteria used for that determination and (3) the anticipated impact that present usage of the water sources will have on future availability of the water source.³⁹ Furthermore, DNR uses this information to generate a preliminary determination as to the appropriation of the water source evaluated.⁴⁰

It is important to note that DNR *must* consider hydrologically connected groundwater sources in all appropriation determinations under the Act, but that there are no guidelines articulated to govern how DNR defines hydrological connections.⁴¹ However, DNR "shall rely on the best

³⁴ *Id.* at 150.

³⁵ *Id.* at 151-52.

³⁶ NEB. REV. STAT. §§ 46-701 to -754 (Reissue 2004, Cum. Supp. 2006 & Supp. 2007).

³⁷ *Id.* § 46-713.

³⁸ *Id.* subsec. (1)(b).

³⁹ *Id.* subsec. (1)(a).

⁴⁰ *Id.* subsec. (1)(b).

⁴¹ *See id.* subsec. (1)(a).

scientific data, information, and methodologies readily available to ensure that the conclusions and results contained in the report are reliable.”⁴² The Act also empowers DNR to issue rules and regulations to further the requirements of the Act, which would include the aforementioned scientific data and information relied upon in making appropriation determinations.⁴³

Pursuant to this authority, DNR promulgated title 457, chapter 24 of the Nebraska Administrative Code (hereinafter “Chapter 24”).⁴⁴ Chapter 24 outlines DNR’s rules for appropriation determinations.⁴⁵ Under Chapter 24, a river basin must be determined to be fully appropriated when DNR establishes that the current usage of groundwater and surface water hydrologically connected within a particular river basin will “in the reasonably foreseeable future” result in (1) the insufficient supply of surface waters to continue serving its present, “beneficial or useful” purpose, which has already been granted an appropriation, (2) the insufficient supply of water from a particular source to continue supplying wells and aquifers dependent on replenishment from that water source, or (3) “reduction in the flow of a river . . . sufficient to cause noncompliance” by the State with any interstate agreement, state or federal law.⁴⁶

If use of the groundwater hydrologically connected to the surface water supplying a river basin would deplete the water supply within twenty-five years, and the junior rights holder cannot divert enough surface water to sufficiently meet the annual irrigation requirement, then the surface water supply for the river basin will be deemed insufficient.⁴⁷

⁴² *Id.* subsec. (1)(d).

⁴³ *Id.* § 46-748.

⁴⁴ 457 NEB. ADMIN. CODE § 24-001 to -002 (2006).

⁴⁵ *See id.*

⁴⁶ *Id.* § 24-001.

⁴⁷ *Id.* § 24-001.01A. Under this rule, the annual crop irrigation requirement will be set according to the irrigation requirement for corn crops. *Id.* Furthermore, this section assumes that the junior rights holder retains an irrigation appropriation. *Id.* § 24-001.01B. If, however, the appropriation is of a different type, DNR may infer the appropriate use, taking into account the original purpose for the appropriation. *Id.* In making its determinations as to the ability of a junior appropriation to divert a sufficient amount of water, DNR will first look to public diversion records, next to the average

FIGHT FOR YOUR RIGHT

Finally, DNR must evaluate the geographic area in which it considers to house hydrologically connected surface water and groundwater.⁴⁸ This geographic area to be considered is “the area within which pumping of a well for fifty years will deplete the river or a base flow tributary thereof by at least ten percent of the amount pumped in that time.”⁴⁹

B. Administrative Procedures for DNR Appropriation Determinations

DNR must first make a preliminary determination as to the appropriation status of a river basin.⁵⁰ This preliminary determination must be followed by prompt notice to all natural resources districts that incorporate any portion of the geographic area defined by DNR’s determination, as well as providing notice to the public.⁵¹ Receipt of notice triggers a mandatory stay on all water permits within the geographic area specified, including all hydrologically connected waters.⁵² Said stay remains in effect until DNR issues a final appropriation determination and considers termination or continuance of the stay.⁵³

Affected natural resources districts are then required to work alongside DNR to contact any other affected groups like public power or irrigation districts.⁵⁴ Once consultation with the affected groups have taken place, DNR must subsequently hold public hearings on the appropriation matter, at which time “any interested person” may appear to contest the appropriation itself, or the determinations about hydrological

number of days diversion of water took place pursuant to prior DNR actions. *Id.* § 24-001.01A.

⁴⁸ *See id.* § 24-001.02.

⁴⁹ *Id.*

⁵⁰ NEB. REV. STAT. § 46-713(1) (Reissue 2004).

⁵¹ *Id.* § 46-714(1). The notice must be sent by certified mail, directed to the manager of the natural resource district, and must be signed by the director of DNR. *Id.* Public notice is provided by publication of preliminary determinations once a week for three weeks in a state-wide newspaper. *Id.*

⁵² *Id.*

⁵³ *Id.* subsec. (4).

⁵⁴ *Id.*

connections.⁵⁵ After the public hearings, DNR has thirty days to notify the affected natural resources districts of its final determination regarding the appropriation at issue.⁵⁶ Upon final determinations, both the affected natural resources group and DNR must jointly produce an integrated management plan for the designated river basin.⁵⁷

C. Nebraska Case Law

The Nebraska Supreme Court has recognized that “ground water and surface water are inextricably related.”⁵⁸ In *Spear T. Ranch, Inc. v. Knaub*, the court was presented with a case in which an appropriation rights holder, Spear T. Ranch, brought an action against an individual, Knaub, using groundwater in a manner interfering with the Ranch’s appropriation rights.⁵⁹

Spear T. Ranch alleged that groundwater wells being pumped by Knaub were hydrologically connected to the surface waters Spear T. Ranch claimed appropriation over.⁶⁰ Further, the pumping caused Spear T. Ranch’s surface waters to be depleted and thereby deprived Spear T. Ranch of its appropriation rights.⁶¹ Upon acknowledging the inextricable connection, the court recognized that the use of groundwater does in fact deplete surface water when a hydrological connection exists.⁶² The court further conceded that “Nebraska water law ignores the hydrological fact that groundwater and surface water are inextricably linked.”⁶³

The bifurcated water rights system, permitting governance of surface water by appropriation and groundwater by riparian principals, creates a “tension” in the court’s view.⁶⁴ Despite recognizing the inherent

⁵⁵ *Id.*

⁵⁶ *Id.* § 46-714(5).

⁵⁷ *Id.* § 46-715(1).

⁵⁸ *Spear T. Ranch, Inc. v. Knaub*, 691 N.W.2d 116, 125 (Neb. 2005).

⁵⁹ *Id.* at 124.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.* at 125.

⁶³ *Id.*

⁶⁴ *Id.* at 126.

FIGHT FOR YOUR RIGHT

difficulty of the two competing doctrines, the court explicitly refused to apply the appropriation doctrine in conflicts between surface water users and groundwater users.⁶⁵

D. *Missouri Water Law and Water Usage*

Unlike Nebraska, Missouri law adopts a riparian-right approach.⁶⁶ Missouri water-right laws have been established by the courts, and therefore there are few statutory provisions regarding water use.⁶⁷ The statutes that do exist aim chiefly to regulate pollution and the state agencies responsible for administering those regulations.⁶⁸ Statutory and judicial definitions differ with respect to surface water. Judicial definitions decline to incorporate rivers and streams into surface water, whereas Missouri statutes define rivers and streams as surface water.⁶⁹ Rather, courts, instead, use the term “watercourses” in reference to streams and rivers.⁷⁰

As such, Missourians are free to reasonably use waters, until such a time that the state courts restrict usage.⁷¹ The Missouri Department of Natural Resources advises that Missourians are legally permitted to use, divert or store as much water as they like, provided that they are not infringing upon the rights of a subsequent riparian user.⁷² Reasonable use of water is determined by Missouri courts on a case-by-case, basis.⁷³

⁶⁵ *Id.*

⁶⁶ Mo. Dep’t of Natural Res., Frequently Asked Missouri Water Law Questions (Nov. 2006), available at <http://www.dnr.mo.gov/pubs/pub1352.pdf>.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.* The Missouri Department of Natural Resources reports no perceivable problems with the differing statutory and judicial definitions used for surface waters, because statutes aim to address pollution and environmental problems and judicially made laws focus on individual rights and use of waters. *Id.*

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

Admittedly, Missouri has failed to maintain documents and records of water usage within the state.⁷⁴ Missouri also acknowledges failure to conduct scientific research to accurately monitor water usage.⁷⁵ Both of these shortcomings are attributed to the riparian system employed by the state and compounded by the ad hoc decision making process regarding water rights.⁷⁶ As such, numerical estimates and figures regarding the usage of water in Missouri are not always reliable and are sometimes even non-existent.

However, like Nebraska, most of the water used within Missouri comes from groundwater sources.⁷⁷ To cite a few examples, industrial water use within the state derives 62.4% of water used from groundwater sources,⁷⁸ while residential users rely on groundwater for 37% of their water usage needs,⁷⁹ and water used for irrigation purposes came from groundwater sources 94% of the time.⁸⁰ Additionally, groundwater recharges both the Missouri and Mississippi Rivers running through the state, with the river levels in direct correlation with groundwater supply.⁸¹ Significantly, the Missouri River supplies the bulk of drinking water consumed in both metropolitan areas of Kansas City and St. Louis, as well as smaller communities along the river, including Boonville and Jefferson

⁷⁴ CHARLES B. DUCHARME & TODD M. MILLER, MO. DEP'T OF NATURAL RES., WATER RESOURCES REPORT NUMBER 48, MISSOURI STATE WATER PLAN SERIOUS VOLUME IV, WATER USE OF MISSOURI 3 (1996), available at <http://www.dnr.mo.gov/pubs/WR48.pdf>.

⁷⁵ *Id.*

⁷⁶ *See id.*

⁷⁷ *Id.* at 8. A 1990 Study estimated that ground water sources comprised 27.3% of Missouri's public water supply, with 72.7% coming from surface waters. *Id.* at 11 fig.4. However, 37.1% of Missouri's population actually obtained water through aquifers and other groundwater sources, while 47.3% used waters directly from the Missouri River. *Id.* fig.5.

⁷⁸ *Id.* at 16 fig.11.

⁷⁹ *Id.* at 11 fig.5.

⁸⁰ *Id.* at 34 fig.18.

⁸¹ DON E. MILLER & JAMES E. VANDIKE, MO. DEP'T OF NATURAL RES., WATER RESOURCES REPORT NUMBER 46, MISSOURI STATE WATER PLAN SERIES VOLUME II, GROUNDWATER RESOURCES OF MISSOURI 138, 140 (1997), available at <http://www.dnr.mo.gov/pubs/WR46.pdf>.

FIGHT FOR YOUR RIGHT

City.⁸² Groundwater located outside of the state of Missouri, in Nebraska, are tributaries to the Missouri River.⁸³ And, while the Missouri River is typically a reliable supplier of drinking water, periods of drought and over use of water reserves, or other substantial depletions of the groundwater supplying the river remain causes of serious concern.⁸⁴

The bulk of groundwater access in Missouri is restricted to the southern portions of the state.⁸⁵ Groundwater is viewed as a “precious commodity” in the northern portions of Missouri, particularly those areas north of the Missouri River.⁸⁶ Recharge rates for groundwater in northern Missouri are particularly low,⁸⁷ increasing the importance of water conservation of the groundwater supplies in that area. The unequal distribution of groundwater in Missouri makes the conservation and responsible use of groundwater sources all the more important.

⁸² DUCHARME & MILLER, *supra* note 74, at 8-9.

⁸³ Missouri Tributaries, YOUR NRD BASIN (Neb. Ass’n of Res. Dist., Lincoln, Neb.), Summer 2009, *available at* http://www.nrdnet.org/nrd_guide/nrd_pages/Basin%20sheets%20fall%2009/Missouri.pdf.

⁸⁴ *Id.* at 10.

⁸⁵ MILLER & VANDIKE, *supra* note 81, at 3.

⁸⁶ *Id.* at 2-3. The following map depicts the plains regions of Missouri where groundwater is abundant. *Id.* at 8.

⁸⁷ *Id.* at 161.

IV. INSTANT DECISION

Upon granting the District's petition for review, Judge Heavican delivered the opinion for the Nebraska Supreme Court.⁸⁸

The court pointed out that whereas agencies are permitted to promulgate rules and regulations, such action must be taken only when authorized by the legislature.⁸⁹ Furthermore, agency action is confined to the amount of authority delegated to it by the legislature.⁹⁰ The court referenced section 46-713 of the Act, which authorizes DNR to promulgate rules governing the "scientific data and other information . . . considered for making the preliminary determinations" pertaining to appropriation.⁹¹ The court then recognized DNR's promulgation of Chapter 24 as pursuant to the authority granted by the Act.⁹²

Furthermore, neither the parties, nor the court, could point to any language in Chapter 24 that *prevents* the inclusion of hydrologically connected groundwater located within geographically different natural resource districts.⁹³ While the District claimed that DNR was precluded from considering areas located in different geographic districts in determining appropriations, absent specific statutory language granting that right, the court disagreed.⁹⁴ The court found this to be particularly true in light of section 46-713's requirement that hydrological connections be evaluated in "each of the state's river basins."⁹⁵

Conversely, the court discussed the Legislature's awareness of the common connections between surface water and groundwater, as well as awareness of these hydrological connections spanning several natural resource districts and different geographical areas.⁹⁶ Citing sections 46-

⁸⁸ Upper Big Blue Natural Res. Dist. v. State Dep't of Natural Res., 756 N.W.2d 145, 147 (2008).

⁸⁹ *Id.* at 617-18.

⁹⁰ *Id.*

⁹¹ *Id.* at 149-50 (quoting NEB. REV. STAT. § 46-713(1)(d) (Reissue 2004)).

⁹² *Id.* at 150.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.* (emphasis omitted) (internal quotations omitted) (quoting § 46-713).

⁹⁶ *Id.* (citing § 46-703(2), (4)).

FIGHT FOR YOUR RIGHT

703 and 46-715, the court acknowledged the legislative intent for full cooperation of all affected districts in matters relating to hydrologically connected waters, particularly “upon a DNR determination that a river basin is fully appropriated.”⁹⁷ Moreover, the court reiterated that section 46-713(1)(a) of the Act *requires* DNR to consider hydrological connections in making appropriation determinations.⁹⁸ Hence, the court found that DNR’s actions fell acceptably within its authority when promulgating Chapter 24 and making appropriation determinations.⁹⁹

However, the court rejected DNR’s claim that the court lacked jurisdiction.¹⁰⁰ Even if the district court lacked jurisdiction over the District’s claims of APA violations, the Nebraska Supreme Court retained jurisdiction to determine the appropriateness of DNR’s promulgation of Chapter 24 pursuant to DNR’s statutory authority.¹⁰¹ The court then established that the district court did in fact have jurisdiction, pursuant to section 84-911(1), which states in part, “the validity of any rule or regulation may be determined upon a petition for a declaratory judgment . . . addressed to the district court”¹⁰²

Accordingly, the court affirmed the district court’s ruling, finding that DNR acted pursuant to its authority in the promulgation of Chapter 24 and that consideration of hydrological connections between water sources located in different geographic regions is permissible in making appropriation determinations.¹⁰³

⁹⁷ *Id.*

⁹⁸ *Id.* at 151.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.* (quoting NEB. REV. STAT. § 84-911(1) (Reissue 2004)).

¹⁰³ *Id.*

IV. COMMENT

A. *Legal Analysis*

The Nebraska Supreme Court correctly found that DNR acted pursuant to an appropriate grant of authority in the promulgation of section 46-713(3), which affords inclusion of hydrologically connected groundwater. Nebraska legislators clearly intended for the consideration of hydrological connections in appropriation determinations, as evidenced by explicitly acknowledging hydrological connections in the Act.¹⁰⁴ Moreover, the Act specifically grants authority to DNR to promulgate such rules and regulations as are necessary to carry out its duties.¹⁰⁵

B. *Appropriation Problems*

The prior appropriation doctrine contains a significant flaw in that over-appropriation is common-place. Over appropriation occurs when claims to water rights exceed the volume of actual water flow of a particular source. For example, claims to the Boise River in 1898 exceeded the actual annual flow of that river by 150 times as farmers diverted the surface waters for irrigation and other uses.¹⁰⁶ Ultimately, such a practice will cause the entire water source to dry up, starting with the surface water and eventually depleting the connected, unseen groundwater.

The doctrine is particularly problematic when it comes to determining how much is too much. Several issues arise including defining beneficial use and establishing at what point in time diversion of water for a purported beneficial use will become excessive and thereby detrimental. In 1995, twenty-eight trillion gallons of groundwater were harnessed and used each day for domestic consumption.¹⁰⁷ More recent

¹⁰⁴ See NEB. REV. STAT. §§ 46-703(1)-(2), 46-713(1)(a).

¹⁰⁵ *Id.* § 46-713(1)(d).

¹⁰⁶ ROBERT GLENNON, WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS 17 (2002).

¹⁰⁷ *Id.* at 3.

FIGHT FOR YOUR RIGHT

estimates indicate that the United States uses 141 billion gallons of water per day for agricultural purposes and another 160 billion gallons per day for industrial and municipal uses.¹⁰⁸ Obviously, using fresh groundwater is necessary for food production and human consumption. But at what point must we consider curbing our water usage in efforts to maintain a supply sufficient to meet our minimum needs in the future? Excessive pumping of groundwater will exhaust the supply of water available for human consumption. Hence, appropriation determinations must be carefully monitored in order to ensure an adequate water supply for future use.

It will be interesting to see how future water right issues are resolved in Nebraska. The present decision makes it clear DNR is vested with the authority to include hydrologically connected groundwater in appropriation determinations, even when the groundwater is located in a distinctively separate geographic area or resource district, and to define what is or is not hydrologically connected. What is not clear is exactly how multiple affected resource districts will jointly coordinate water management efforts pursuant to section 46-715 of the Nebraska Revised Statutes in light of differing interests in the hydrologically connected bodies.

This problem is further compounded by the decision of *Spear T. Ranch*, as Nebraska patently disregarded the indivisible connection between hydrologically groundwater and surface water with respect to allowing a single water right theory to govern use of such connected waters. Permitting the dual rights systems to be used for the two types of waters, appropriation for surface waters and reasonable use for groundwater, makes it inevitable that problems will ensue as Nebraska continues to make appropriation determinations.

¹⁰⁸ Agricultural Water Conservation Clearinghouse, FAQs – Water Supply, Sources, & Agricultural Use, <http://agwaterconservation.colostate.edu/> (last visited Jan. 23, 2010) (follow “FAQs” hyperlink; then follow “Water Supply, Sources, & Agricultural Use” hyperlink).

C. Recommendations for both Nebraska and Missouri

First, clear parameters should be established to define the working relationship between DNR and resource districts. Whereas a joint effort is required to generate a management plan once DNR has made a final appropriation determination, it remains to be seen which organization, or competing resource district for that matter, will prevail. Ideally, all interested parties would be able to compromise and find a mutually beneficial way to manage the hydrologically connected waters. However, in reality, it is more likely that competing interests in allocating finite water resources will yield a management plan which fails to meet all affected parties' needs or interests.

Next, because Nebraska statutes delegate the authority to govern groundwater to the resource districts, it may be appropriate to establish a procedure in which the resource district actively participates in the initial determinations made by DNR regarding appropriations. As it stands, resource districts are only notified about potential inclusion of groundwater once DNR has made a preliminary determination. Soliciting input from resource districts during initial considerations, prior to any determination, would not only foster a stronger working relationship between DNR and the resource districts during future endeavors, but also could illuminate current and projected management of the groundwater.

Ultimately, inclusion of hydrologically connected groundwater in the appropriation determination of surface waters, when done so in a thoughtful, careful manner, could lead to a much needed preservation of water. Consideration of the use of groundwater supplying water to fill streams and rivers could effectively take into account the potential depletion of surface water. Should a groundwater aquifer that contributes to stream flow be subject to extensive use, through wells and water pumping, *Big Blue* permits DNR to find the hydrologically connected surface water fully appropriated. At that juncture, no more rights to the surface water may be granted. This approach will curb additional diversion of surface water that would extinguish the surface water all together.

I would challenge DNR to also consider working alongside neighboring states that have surface water hydrologically connected to

FIGHT FOR YOUR RIGHT

waters located within the borders of Nebraska. Nebraska's surface water serves as tributaries to the Missouri River. As discussed above, the Missouri River is a significant supplier of water for Missourians, particularly Missourians living in Kansas City and other northern cities within the state. Hence, appropriation determinations of surface water located within the confines of Nebraska's borders potentially impact water availability and usage for Missouri's residents.

Furthermore, Missouri would be well served to consider implementation of appropriation determinations with respect to surface water hydrologically connected to groundwater in areas north of the Missouri River. Due to the scarcity of usable groundwater in that geographic area, more steps could be taken to ensure that groundwater are reasonably and appropriately used in a manner to avoid over use and, ultimately, exhaustion.

VI. CONCLUSION

By affirming the Department of Natural Resource's ability to include hydrologically connected groundwater in surface water appropriation determinations, even when the two are located in separate geographic locations/natural resource districts, the Nebraska Supreme Court took a step in the direction of water preservation. Due to the intricate entwinement of groundwater and surface water, consideration of the connection affords an opportunity to place limitations on the appropriation rights granted, and ultimately the consumption and usage of Nebraska's water. Curbing appropriation grants of surface water recharged by extensively used groundwater stores will decrease the likelihood of drying up streams and rivers.

CHELSEÁ R. MITCHELL

