

AGRICULTURAL ACCESS TO SURFACE AND GROUND WATER UNDER NEBRASKA LAW: AN OVERVIEW

CAUTION: This article is intended for educational purposes, only. It does not constitute legal advice. Nor is it a substitute for legal advice. Laws, regulations and rules may change with some frequency. It is important to consult with an attorney who is knowledgeable in this area of the law.

This is a summary section of a longer treatment of Nebraska water law from an agricultural perspective. That full discussion, like a half-mile center pivot system, covers a lot of ground. Accordingly, for convenience, this selection summarizes (1) Nebraska's regulatory system, and (2) the key features of Nebraska surface and ground water law. Both are reasonably susceptible to general description. Indeed, there are core features to both with which all producers should be familiar. The problem, though, is that the devil lurks in the details of Nebraska water law and its administration.

THE REGULATORY SYSTEM

The Nebraska Department of Natural Resources ("DNR") regulates and administers agricultural access to surface waters.¹ Meanwhile, a producer's development and use of ground water are subject to control at a more local level, by the state's twenty-three natural resource districts ("NRDs").² The DNR, though, plays an important role in the administration and regulation of ground water.³ Similarly, the NRDs have a growing part in surface water administration, especially with respect to recreational uses and environmental objectives. As most irrigators are likely to know, the DNR and the NRDs are also engaged in a coordinated effort jointly to manage hydrologically connected surface and ground water supplies.⁴

From an agricultural perspective, the DNR's core tasks may be summarized as follows: (1) administer the surface water permit system in effect since 1895;⁵ (2) oversee the registration, location and spacing of ground water irrigation wells;⁶ (3) regulate the transfers of ground water to agricultural production units elsewhere in Nebraska⁷ or in adjoining states;⁸ and (4) coordinate and lead an ongoing joint effort with the NRDs to manage hydrologically connected surface and ground water, on a location-specific basis.⁹

The core tasks of the NRDs are as follows: (1) starting in 1975, coordinate with the DNR in designating and managing specific localities ("control areas");¹⁰ limit irrigation well construction¹¹ as well as groundwater consumption in such control areas,¹²

as well as develop rules and regulation to control surface runoff of groundwater used for irrigation, coupled with the power to issue cease-and-desist orders to halt violations;¹³ (2) starting in 1982, develop ground water management plans, subject to DNR review and approval;¹⁴ designate ground water management areas and impose controls as deemed necessary by the NRD to protect ground water supplies and avoid disputes between surface water appropriators and ground water users;¹⁵ (3) starting in 2004, develop IMP's for hydrologically connected surface water and ground water,¹⁶ where designated by the DNR as fully or over-appropriated;¹⁷ and (4) starting in 2010, develop voluntary IMP's.¹⁸

A. THE LAW

1. Surface Waters

The law of surface waters in Nebraska may fairly be summarized as the common law of England, except as: (a) modified or abrogated by state statute or constitutional provision, and (b) modified or supplemented by the Nebraska Supreme Court. Although not entirely free from doubt, current Nebraska surface law may be generally described as follows:

a) Diffused Surface Waters

Diffused surface waters are generally, but not exclusively, the water that immediately accumulates and drains across the land as a result of precipitation.¹⁹ Diffused surface waters historically have been referred to as "surface waters."²⁰ Current law governing diffused surface water generally conforms to the common law of England,²¹ meaning among other things that diffused surface water is the property of the landowner.²² That said, the legislature declared "water" public property in 2003.²³ The effect of this declaration on private ownership of diffused surface water while it is present on a producer's property has yet to be addressed by the Nebraska Supreme Court.

b) Confined Surface Waters

For regulatory purposes, confined surface waters are, in general, waters that flow perennially -- or at least regularly for some part of the year -- in the state's creeks, streams and rivers.²⁴ The term also encompasses natural lakes.²⁵

Unlike diffused surface water, confined surface waters have never been the property of landowners under Nebraska law (even though they likely own the land beneath such a watercourse as it crosses their ranch or farm; or to the center of the watercourse, referred to as the thread, should it form the border of their lands).²⁶ Instead, at common law, each landowner whose property touched such a body of water possesses the same and equal right to make reasonable use the water, as it flowed past or through

his or her property,²⁷ and were each entitled to the free flow of water in its natural state, undiminished in quantity and unimpaired in quality by upstream landowners.²⁸ Such rights are known as riparian rights. They attach to and are limited to the riparian lands bordering the watercourse.²⁹

Making a long story short, while limited irrigation is compatible with the riparian rights doctrine,³⁰ large-scale diversions and concomitant significant reductions in stream flow are not.³¹ As the profusion of irrigation districts and canals in Nebraska indicate, there was a major change in the laws governing confined surface waters in Nebraska.

That seismic shift occurred April 4, 1895, with passage of Akers Law, a comprehensive irrigation code.³² Akers Law established an application-and-permit system that allowed applicants – after obtaining the state’s permission -- to divert or otherwise appropriate confined surface waters for large-scale irrigation and other purposes,³³ for use on riparian as well as non-riparian lands.³⁴ Each such authorized allocation was subject to a beneficial use requirement³⁵ and closure based on seniority in time of shortage.³⁶ That seniority system was subject to a preferential use provision.³⁷ That statute also called for adjudication of preexisting diversions, to establish their seniority in times of shortage as well as their allotments of confined surface water.³⁸

At the same time, Akers Law abolished riparian rights, prospectively.³⁹ Riparian rights that vested prior to April 4, 1895, however, survived.⁴⁰ Thus, unlike Nebraska’s 1889 irrigation code,⁴¹ as amended in 1893,⁴² which abolished riparian rights in increasingly smaller streams, Akers Law survived constitutional challenge.⁴³ Vested riparian rights remain subject to enforcement today,⁴⁴ upon proof of vested rights status.⁴⁵ Further, in 1903, confined surface water appropriations in existence as of April 4, 1895 were adjudged vested common law rights by the Nebraska Supreme Court.⁴⁶ These preexisting appropriations – unlike those obtained pursuant to statutory permit – are not subject to the quantitative restrictions under Akers Law or later statutes or regulations.⁴⁷

The core elements of Akers Law were elevated to constitutional status in 1920.⁴⁸ The permit system established by Akers Law remains the backbone of modern surface water regulation in Nebraska.⁴⁹ These permits generally run with the land serviced.⁵⁰ However, according to the DNR, they are not recorded with land deeds and do not transfer upon conveyance of the property. Instead, it is the obligation of the landowner(s) to inform the DNR of ownership changes.⁵¹ While DNR has jurisdiction over the statutory permit system, riparian rights – unless previously adjudicated – are handled by the courts.⁵² In other words, the DNR cannot issue closure notices to permittees based upon another user’s riparian rights, unless the user’s riparian rights have been adjudicated superior to the appropriator’s permit rights.

c) *Transported Waters*

Irrigation districts and other providers generally obtain confined surface waters that their members or customers use pursuant to the 1895 permit system.⁵³ While the provider holds the permit, water rights generally attach to the land being serviced.⁵⁴ Subject to certain core statutory obligations and conditions,⁵⁵ producer water rights are generally governed by the provider's rules and regulations.

2. *Ground Water*

The law of ground water in Nebraska has grown increasingly complex. Our understanding of the law is as follows: the common law of England controls, except as modified by the Nebraska Supreme Court and the legislature. Thus, it appears that there is a common law right to extract ground water that runs with the land, but the exercise of that right must be in conformance with certain statutory requirements administered by the DNR, affecting the registration, location and spacing of irrigation wells. Further, that right is subject to more stringent controls and restrictions at the hands of the NRDs. The extent to which NRD restrictions and controls amount to the impairment or confiscation of vested common law property rights remains open, despite what appears to be judicial deference to heightened regulation of ground water. Indeed, after nearly 120 years of judicial and legislative attention, the law governing "ownership" of ground water appears turbid, in both senses of the word: muddled and muddy. As discussed below, there are landowner property rights in ground water, recognized both by statute and case law. But their parameters are in flux.

a) *The Common Law Rule*

The common law separated ground water into two categories: underground streams and percolating water.⁵⁶ All ground water was presumed to be percolating water.⁵⁷ If the underground water was flowing in a proven underground stream, it was subject to riparian rights doctrine.⁵⁸ Obviously, if proof of an underground stream failed, then the ground water was percolating water. As such, it was deemed part of the property, in the same fashion as diffused surface water.⁵⁹ In short, unless a known underground stream was involved, at English common law the landowner was entitled to access and use the water beneath his or her property without restriction.⁶⁰ At the same time, a landowner had no claim against an adjacent owner whose ground water pumping operations were depleting the ground water beneath surrounding properties – the resulting depletion was known as *damnum absque injuria*.⁶¹ In 1894, the Nebraska Supreme Court declared the English "absolute dominion" rule as too well established for dispute.⁶²

In other words -- and as repeatedly acknowledged by the Nebraska Supreme Court -- at English common law a landowner was entitled to extract groundwater at his or her discretion without limitation, without regard to purpose, and without regard to the diminution or extinction of neighboring groundwater supplies.⁶³ It was not until 1933 -- long after most of the public domain was patented in private owners -- that the Nebraska Supreme Court in dicta adopted the American rule of reasonable use, coupled with application of the correlative rights doctrine in time of groundwater scarcity.⁶⁴ As explained below, the overlying landowner not only retains his or her proprietary interest in the water with these modifications, but in fact receives additional protection of his or her property right.

b) Judicial Modification of the Common Law Rule

In *Olson v. City of Wahoo*, in the midst of an extraordinary drought that persisted for much of the 1930's,⁶⁵ the Nebraska Supreme Court unilaterally placed potential limits on a landowner's right to appropriate ground water.⁶⁶ First, it imposed a reasonable use and beneficial use requirement.⁶⁷ Although the Nebraska Supreme Court has repeatedly declared the reasonable use rule to be in effect in Nebraska,⁶⁸ the "rule" has yet to be applied to resolve a well interference dispute. In any event, the reasonable use rule, in a nutshell, enables an adjacent landowner whose ground water supply is adversely impacted by a neighbor's pumping to seek relief in court, to the extent the offending owner is applying water wastefully, or transporting it beyond the overlying lands.⁶⁹

At the same time it proclaimed adherence to the reasonable use rule, the Nebraska Supreme Court adopted the correlative rights doctrine.⁷⁰ This doctrine, in essence, protects an overlying owner's right of appropriation when the underground source was insufficient to meet the needs of the overlying owners.⁷¹ Under such circumstances, an owner is entitled to ask a court to regulate pumping activities so that his or her ground water is not exhausted or rendered inaccessible by another landowner's pumping operations.⁷² In a word, the correlative rights doctrine addresses the chief criticism of English common law rule, by recognizing a legally protectable property interest in ground water so as to enable a landowner to prevent his or her supply from being drained by adjacent pumping operations.⁷³

Like the reasonable use rule, the correlative rights doctrine has been repeatedly endorsed in principle by the Nebraska Supreme Court,⁷⁴ but not actually applied as a rule of decision. In a word, the Court's reasonable use rule and correlative rights doctrine, regardless of repetition, amounted to judicial dictum, but not law. That said the legislature adopted the reasonable use rule and correlative rights doctrine in 1982 -- but without defining either.⁷⁵ Like the legislature's claim of public ownership of ground water in 2003, the meaning and effect of the reasonable use rule and correlative rights

doctrine in their statutory form have yet to be construed and applied by the Nebraska Supreme Court.

c) **Statutory Considerations**

In addition to the limitations on irrigation wells represented in theory by the reasonable use rule and correlative rights doctrine, the legislature in the late 1950s and early 1960s imposed registration, recording, location and spacing requirements, all administered by the DNR.⁷⁶ In 1975, a landowner's access to ground water became generally subject to administration by the local natural resource district, in accordance with the terms of the Ground Water Management Act ("GWMA").⁷⁷

The GWMA was amended and renamed the Ground Water Management and Protection Act ("GWMPA") in 1981, to reflect the inclusion of anti-pollution provisions.⁷⁸ It has since undergone repeated amendment, seemingly on an annual basis over the past two decades. The more important changes involve the expansion of NRD responsibilities and powers in controlling access and use of ground water, based upon DNR findings that river basins or portions thereof are fully or even over-appropriated.

Under current law, spacing and location requirements can be rendered more stringent by the local NRD. Further, NRDs are authorized to place quantitative restrictions on the amount of water extracted by an irrigation well, as well as limit the opportunity to access ground water to certain lands, banning new or replacement wells if lands were not irrigated within a certain time frame. Although such exercises of power by the NRDs have been challenged on constitutional grounds in two cases,⁷⁹ the cases fall short of squarely and decisively addressing the vested rights doctrine, as previously applied by the Nebraska Supreme Court in the context of surface water.

In analyzing property rights in ground water, consideration should be given to the Nebraska Supreme Court's treatment of riparian rights⁸⁰ and surface water appropriations⁸¹ that pre-date Akers Law, namely, the moment when the legislature declared all "unappropriated waters" in Nebraska's natural streams to be public property,⁸² or *publici juris*.⁸³

Like statutory appropriations authorized pursuant to Akers Law,⁸⁴ these pre-existing riparian rights⁸⁵ and surface water appropriations⁸⁶ are vested common law property rights; as such, they are not only subject to enforcement, but constitutionally shielded from governmental impairment or confiscation without due process of law, including compensation.⁸⁷ Further, pre-Akers Law surface water appropriations -- due to their status as vested common law property rights -- are not subject to the quantitative limitations on water appropriations⁸⁸ set out in the 1895 Act⁸⁹ or subsequent legislation.⁹⁰

At first glance, the implications as to ground-water irrigation wells and related acreages in operation before ground water was first declared “public property” in 2003 by the legislature appear significant. The vested rights analysis immunizing pre-Akers Law surface appropriations from subsequent quantitative restrictions applies with equal if not greater force to irrigation wells and related acres in service prior to the statutory authorization, if not NRD imposition, of quantitative restrictions on ground water pumping.⁹¹ This is so because the right to appropriate ground water has been recognized and treated as a private property right of the surface owner, both before and after passage of the GWMPA.⁹²

In fact, the correlative rights doctrine is premised upon each overlying landowner possessing a legally enforceable property interest in the underlying ground water.⁹³ Further, it must also be noted that the Unicameral, when it enacted the 1963 Municipal and Rural Domestic Ground Water Transfers Permit Act⁹⁴ authorizing public authorities to drill, extract and transport pump ground water from private lands to remote locations in violation of common law⁹⁵ – also expressly recognized the common law “...right of an owner of an estate or interest in land to recover damage for any injury done to his or her land or to any water rights appurtenant thereto.” *See* 46 Neb. Rev. Stat. § 46-547 (Reissue 2010).

Accordingly, producers and their counsel may wish to monitor key dates and events involving local ground water controls, including expiration of the local NRDs current ground water allocations, if any, as well as the expiration of the local moratorium on well drilling, if any, plus any and all hearings to renew, extend or modify such restrictions, together with hearings on the local watershed’s appropriated status. *Parties inclined to test their rights and/or challenge onerous rules and regulations, determinations, and/or orders must give cautious and careful attention to the forums, procedures and time frames for seeking relief.*

d) The Ownership Issue

The case law in Nebraska and elsewhere applying the vested rights doctrine tends to suggest that landowners have a vested right to access ground water, based on the law in effect at the time their lands were first patented.⁹⁶ By analogy and necessary implication, the English common law right vested upon severance of the land from the public domain, in the same fashion as riparian rights. On this issue, it is vital to recognize that **none** of the patents originally issued in Nebraska were subject to the Desert land Act of 1877,⁹⁷ which severed surface and ground water from the land itself for future conveyancing purposes. Similarly, wells in operation prior to passage to the Ground Water Management Act in 1975, if not under later amendments, arguably are vested rights not subject to quantity of water restrictions imposed after they were first put in use.⁹⁸ In short, while the issue is not free from doubt, such restrictions may constitute

government action for which just and adequate compensation may be owed, pursuant to the Nebraska and federal constitutions.

Patent analysis calls for sophisticated factual and legal research and analysis, as the correct legal result requires (thorough) historical investigation, from a factual as well as federal statutory standpoint; it also requires (acute) familiarity with the case law governing construction of patents, not to mention U.S. Supreme Court precedents addressing the role of state law in determining water rights.

Final Comment

As stated, this summary is part of a longer discussion and analysis of Nebraska water law. The longer treatment includes detailed discussions of the bifurcated regulatory system, the sources of agricultural water, and further in depth discussion of surface and groundwater rights in Nebraska, including recent legislative efforts and the Spencer Dam saga. There appears to be little, if anything, simple when it comes to determining and enforcing an agricultural producer's property rights with respect to surface or ground water for irrigation purposes. We finish where we began -- there is no substitute for a consultations with experienced counsel in evaluating the existence, scope and obstacles to enforcement of such rights.

For additional information, readers may contact the Nebraska Rural Response Hotline (1-800-464-0258), a service of Legal Aid of Nebraska and the Interchurch Ministries of Nebraska or, for additional information on the fuller discussion of agricultural access under Nebraska water law, the reader may contact the attorney with whom Legal Aid contracted to produce this summary:

*Joe Hawbaker
Hawbaker Law Office
Omaha, Nebraska*

¹ See Neb. Rev. Stat. § 61-206(1) (Reissue 2009). The DNR assumed the responsibilities and functions formerly exercised by the Department of Water Resources and the Nebraska Natural Resources Commission. See Neb. Rev. Stat. § 61-205 (Reissue 2009). The task of administering Nebraska's surface water resources was first performed by the State Irrigation Board created in 1895. From 1911 to 1919, the permit system was administered by the State Board of Irrigation, Water Power and Drainage. In 1919, the agency's name was changed to Department of Public Works; and again in 1933, to Department of Roads and Irrigation. In 1957, the legislature transferred the powers and functions exercised by the Department of Roads and Irrigation to the newly created Department of Water Resources. In 2000, the statutory responsibilities of the Department of Water Resources were transferred to the DNR. See *Nebraska Blue Book, 2014-2015*, pp. 558-56; See also http://www.nebraskahistory.org/libarch/research/public/state_finding_aids/water_resources_dept.pdf.

² Neb. Rev. Stat. § 46-702 (2010) ("The Legislature also finds that natural resources districts have the legal authority to regulate certain activities and, except as otherwise specifically provided by statute, as local entities are the preferred regulators of activities which may contribute to ground water depletion");

see also Neb. Rev. Stat. § 2-3229 (Reissue 2012) (twelve purposes of NRD's include "the development, management, utilization, and conservation of ground water and surface water"). Take note, though, that such provisions do not confer automatic standing upon the NRD's to represent the interests of constituents in litigation. *Metropolitan Utilities Dist. v. Twin Platte Natural Resources Dist.*, 250 Neb. 442, 550 N.W.2d 907 (1996) (Twin Platte NRD lacked standing to object to MUD's proposed appropriation of Platte river water to recharge its ground water wells).

³ For a general discussion of the DNR's role as to Nebraska ground water, see *Conjunctive Management of Hydrologically Connected Surface Water and Ground Water: The Problem of Sustainable Use*, 54 RMMFLF-INST 14-1 (2008), footnotes 90-107 and corresponding text (electronic version; pages unnumbered).

⁴ For further discussion, see C. Hoffman and S. Zellmer, *Assessing Institutional Ability to Support Adaptive, Integrated Water Resources Management*, 91 Neb. L. Rev. 805, 815-821 (2013); and M. Kelly, *Nebraska's Evolving Water Law: Overview of Challenges and Opportunities*, Platte Institute Policy Study (September 2010); see also S.D. Mossman, "Whiskey is for Drinkin' but Water is for Fightin' About: A First-Hand Account of Nebraska's Integrated Management of Ground and Surface Water Debate and the Passage of L.B. 108", 30 Creighton L. Rev. 67 (1996).

The Unicameral's efforts at regulating hydrologically-connected water resources are also addressed in J. D. Aiken, *The Western Common Law of Tributary Water: Implications for Nebraska*, 83 Neb. L. Rev. 541 (2004) and J.D. Aiken, *Hydrologically-Connected Ground Water, Section 858 and the Spear T Decision*, 84 Neb. L. Rev. 962 (2006); and D. Blankenau, T. Wilmoth & J. Broom, *Spear T. Ranch v. Knaub: The Reincarnation of Riparianism in Nebraska Law*, 38 Creighton L. Rev. 1203 (2005).

⁵ See in general Neb. Rev. Stat. §§ 46-201 to 46-207 (Reissue 2010) (core principles of prior appropriation permit system); Sections 46-226 to 46-231 (adjudications of water rights, including termination procedures); and Sections 46-233 to 46-243 (appropriation application process); see also Sections 46-244 to 46-273 (rules governing transported water); and 46-2,120 to 46-2,130 (transfers of appropriations by irrigation districts and canal companies). The DNR other surface water regulatory responsibilities include oversight of inter-basin and intra-basin transfers of surface water, the use of surface water for underground storage, and instream appropriations. See Sections 46-288 to 46-294.05; Sections 46-295 to 46-2,106; and 46-2,107 to 46-2,119, respectively.

⁶ Neb. Rev. Stat. §§ 46-601 through 46-611 (2010).

⁷ Neb. Rev. Stat. § 46-691 (Reissue 2010).

⁸ Neb. Rev. Stat. § 46-613.01 (Reissue 2010).

⁹ Neb. Rev. Stat. §§ 46-713 to 46-718; and § 46-720 (Reissue 2010). A dispute between the DNR and a NRD is heard by an Interrelated Water Review Board specially empaneled to resolve the disagreement by the Governor. Neb. Rev. Stat. §§ 46-719 (Reissue 2010).

¹⁰ Laws 1975, LB 577, §§ 2(9) and 3.

¹¹ Laws 1975, LB 577, §§ 4-7.

¹² Laws 1975, LB 577, §§ 10-14.

¹³ LB 577, § 9, now codified as amended at Neb. Rev. Stat. § 46-708 (Reissue 2010).

¹⁴ Laws 1982, LB 375, §§ 3 and 4, now codified at Neb. Rev. Stat. §§ 46-709 and 46-710 (Reissue 2010); see also Section 46-711 (DNR review requirements).

¹⁵ Neb. Rev. Stat. § 46-712 (reissue 2010).

-
- ¹⁶ Laws 2004, LB 962, §54, now codified at Neb. Rev. Stat. § 46-714 (Reissue 2010).
- ¹⁷ Laws 2004, LB 962, § 53, now codified at Neb. Rev. Stat. § 46-713 (Reissue 2010). Such a designation triggers, in effect, a prohibition on further development of surface and ground water resources in the affected area. *See* Neb. Rev. Stat. § 46-714 (Reissue 2010).
- ¹⁸ Laws 2010, LB 764, § 1, now codified at Neb. Rev. Stat. § 46-715(1)(b) (Reissue 2010).
- ¹⁹ *See* Restatement (Second) of Torts, § 846, comment (b) (1979).
- ²⁰ *See for example, Nichol v. Yocum*, 173 Neb. 298, 303, 113 N.W.2d 195, 198-199 (1962) (seminal case in Nebraska Supreme Court; reviews and applies common law rules governing “surface waters” to “diffused surface waters”).
- ²¹ The doctrine of the common law in regard to surface water is in force and prevails in this state as a general rule.” *Town v. Missouri Pac. Ry. Co.*, 50 Neb. 768, 774, 70 N.W. 402, 404 (1897); *accord, Nichol v. Yocum, supra*, 173 Neb. at 303, 113 N.W.2d at 198.
- ²² *Town v. Missouri Pac. Ry. Co., supra*, 50 Neb. at 774, 70 N. W. at 404; *Nichol v. Yocum, supra*, 173 Neb. at 307, 113 N.W.2d at 201; *see also Jameson v. Nelson*, 211 Neb. 259, 264, 318 N.W.2d 259, 263 (1982).
- ²³ Laws 2003, LB 619, § 10, p. 1117, now codified at Neb. Rev. Stat. § 46-702 (Reissue 2010).
- ²⁴ *Harnsberger & Thorson*, pp. 10-11.
- ²⁵ *Id.*
- ²⁶ River beds in Nebraska are as effectually the subject of private ownership as other property, except that, in case of navigable streams, there is an easement for public navigation. *Theis v. Platte Valley Public Power & Irr. Dist.*, 137 Neb. 344, 346, 289 N.W. 386, 387-388 (1939), *citing Kinkead v. Turgeon*, 74 Neb. 573, 109 N.W. 744, 748 (1906) (applying common law of England rule, per adoption statute, in holding that riparian lands along Missouri River extended to the river’s thread, subject to a public easement of navigation). The rule in Nebraska is as follows:
- Under Nebraska law, title to riparian land, that is, land with water flowing over it or along its border, runs to the thread, or center, of the contiguous stream. *See Cofer v. Kuhlman*, 214 Neb. 341, 333 N.W.2d 905 (1983). *See, also, Saunders County v. Metropolitan Utilities Dist.-A*, 11 Neb. App. 138, 645 N.W.2d 805 (2002). The thread of a channel is the line which would give the landowners on either side access to the water, whatever its stage might be and particularly at its lowest flow. *Anderson v. Cumaston*, 258 Neb. 891, 606 N.W.2d 817 (2000). The thread of the stream is that portion of a waterway which would be the last to dry up. *Id.* Where the thread of the main channel of a river is the boundary line between two estates and it changes by the slow and natural processes of accretion and reliction, the boundary follows the channel. *Zeimba v. Zeller*, 165 Neb. 419, 86 N.W.2d 190 (1957).
- Madson v. TBT Ltd. Liability Co.*, 12 Neb. App. 773, 784-785, 686 N.W.2d 85, 95 (2004).
- ²⁷ The common law right of reasonable use runs with the land itself. *See Crawford Co. v. Hathaway*, 67 Neb. 325, 342, 93 N.W. 781, 787 (1903) (“At common law every riparian proprietor, as an incident to his estate, is entitled to the natural flow of the water of running streams through his land, undiminished in quantity and unimpaired in quality, although all have the right to the reasonable use thereof for the ordinary purposes of life.... and any unlawful diversion thereof is an actionable wrong”).
- ²⁸ The Nebraska Supreme Court originally embraced the “natural flow” English common law doctrine of riparian rights *in its purest form*: “Every owner of land through which a stream flows is entitled

to the use and enjoyment of the water, and to have the same flow in its natural and accustomed course, without obstruction, diversion or pollution. The right extends to quality as well as quantity of the water.” *Barton v. Union Cattle Co.*, 28 Neb. 350, 356, 44 N.W. 454, 455 (1889) (downstream riparian proprietor on Sarpy Creek entitled to abatement of pollution caused by upstream cattle operation); *accord*, *Plattsmouth Water Co. v. Smith*, 57 Neb. 579, 584, 78 N.W. 275, 277 (1899) water company operating at mouth of Platte River “entitled to the usual, natural, regular quantity of the water in said stream flow uninterruptedly, and without material diminution or alteration, through the channel to or past its property;” injunction to prevent upstream riparian from altering flow granted); and *In re Metropolitan Utilities District of Omaha*, 179 Neb. 783, 797, 140 N.W.2d 626, 635 (1966) (“At common law a riparian landowner is entitled to have the stream flow through or by his land, essentially undiminished in quantity and unimpaired in quality, and he may make whatever domestic use of the water he desires and he does not forfeit those rights by nonuser”).

²⁹ *Osterman v. Central Nebraska Public Power & Irr. Dist.*, 131 Neb. 356, 366, 268 N.W. 334, 339 (1936).

³⁰ *Meng v. Coffee*, 67 Neb. 500, 503, 93 N.W. 713, 714 (1903), *appeal after remand*, *Brewster v. Meng*, 76 Neb. 560, 107 N.W. 752 (1906).

³¹ *Id.*

³² See Laws 1895, ch. 93a – *Water Rights and Irrigation*; see also 7 Neb. Comp. Stat. (1895), §§ 5440-5526, pp. 1101-1133 (hereinafter “Akers Law” or “1895 Act”).

Akers Law *inter alia* established a “state board of irrigation” to prioritize pre-existing surface water appropriations, beginning with “the streams most used for irrigation.” See Ch. 93a, §§ 1-28; see in particular §§ 5 and 16. The statute further declared “the water of every natural stream not heretofore appropriated” to be “property of the public,” “subject to appropriation,” and that “the right to divert unappropriated waters for a beneficial use shall never be denied.” See Ch. 93a, §§ 42-43. All *future* appropriations were subject to prior review and approval by the board. Ch. 93a, § 28. The board was authorized to award applicants less water than requested, but obliged to approve statutorily-compliant applications, subject to two conditions: (1) unappropriated water remains available in the applicant’s proposed source of supply; and (2) the proposed “appropriation is not otherwise detrimental to the public welfare.” *Id.* The legislation is named after its chief sponsor, R.C. Akers, an irrigator himself, who later served on the board. See A.G. Gless and P.G. Longo, *An Overview of Nebraska Water Law, appearing in* A.G. Gless, ed., *The History of Nebraska Law* (Ohio State Press 2008), p. 91.

The constitutionality of the state irrigation board’s quasi-judicial role and powers were affirmed by the Nebraska Supreme Court in 1903. See *Crawford Co. v. Hathaway*, 67 Neb. 325, 93 N.W. 781 (1903), *overruled in part on other grounds*, *Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966). The constitutionality of the appropriation permit system was upheld in *Farmers’ Irr. Dist. v. Frank*, 72 Neb. 136, 100 N.W. 286 (1904).

³³ Laws 1895, ch. 93a, § 28, pp. 252-254. The application process is now codified as amended at Neb. Rev. Stat. § 46-235 (Reissue 2010).

³⁴ *In re Application A-16642*, 236 Neb. 671, 683-684, 463 N.W.2d 591, 601 (1990).

³⁵ Laws 1895, ch. 93a, § 16, p. 248 (“All appropriations for water must be for some beneficial or useful purpose, and when the appropriator or his successor in interest ceases to use it for such purpose the right ceases”). The beneficial use requirement is now codified as amended at Neb. Rev. Stat. § 46-229 (Reissue 2010).

³⁶ Laws 1895, ch. 93a, §§ 20, 35 and 43, pp. 248, 255-256 and 260, respectively.

³⁷ Laws 1895, ch. 93a, § 43, p. 260. The preferential use provision is now codified as amended at Neb. Rev. Stat. § 46-204 (Reissue 2010). The proposition that a senior appropriator's appropriation was subject to condemnation by a junior appropriator as a precondition to enforcement of a superior preference was not set out in Akers Law. It was apparently first introduced by the Nebraska Supreme Court in *In re Kearney Water & Electric Powers Co.*, 97 Neb. 139, 146-147, 149 N.W. 363, 366-367 (1914) (power appropriation undertaken pursuant to 1877 irrigation act was protectable vested right). However, the condemnation precondition was specified in the 1920 amendments elevating the surface prior appropriation scheme under Akers Law to constitutional status. *See* Neb. Const., Art. XV, §§ 4-7; *see in particular* Section 6 ("Provided, no inferior right to the use of the waters of this state shall be acquired by a superior right without just compensation therefor to the inferior user"); *see also* Neb. Rev. Stat. §§ 70-668 and 70-669 (Reissue 2009), as amended by Laws 2016, LB 1038, §§ 13 and 14, effective July 21, 2016.

³⁸ Laws 1895, Ch. 93a, §§ 1-28; *see in particular* §§ 5 and 16.

³⁹ *Crawford Co. v. Hathaway*, 67 Neb. 325, 342, 93 N.W. 781, 786-787 (1903), *overruled on other grounds*, *Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966) (effective date of Akers Law rather than 1889 St. Raynor Act established cut-off date for further vesting of riparian rights).

⁴⁰ *Id.*

⁴¹ Laws 1889, c. 28, Art. 1, § 1, p. 503.

⁴² Laws 1893, c. 40, § 1, pp. 377-378.

⁴³ *See Clark v. Cambridge & A. Irr. & Imp. Co.*, 45 Neb. 798, 807, 64 N.W. 239, 241 (1895) ("The provision of Act March 27, 1889, as amended by Act 1893, abolishing riparian rights in all streams over 20 feet in width, without making compensation to the riparian owners, is invalid"); *see also Crawford Co. v. Hathaway*, *supra*, 67 Neb. at 342, 93 N.W. at 786 (favorable discussion of *Clark* ruling).

⁴⁴ In addition to the *Clark* and *Crawford Co.* decisions, parties interested in vested rights doctrine in general and riparian rights in particular may find the following decisions helpful: *Slattery v. Harley*, 58 Neb. 575, 79 N.W. 151, 152 (1899); *Meng v. Coffee*, 67 Neb. 500, 503, 93 N.W. 713, 714 (1903), *appeal after remand*, *Brewster v. Meng*, 76 Neb. 560, 107 N.W. 752 (1906); *McCook Irrigation & Water Power Co. v. Crews*, 70 Neb. 109, 96 N.W. 996 (1903), *reversed on rehearing*, 70 Neb. 115, 102 Neb. 249 (1905); *Cline v. Stock*, 71 Neb. 70, 98 N.W. 454 (1904), *prior opinion vacated and judgment affirmed*, 71 Neb. 79, 102 N.W. 265 (1905); *In re Platte River Public Power & irrigation Dist.*, 132 Neb. 292, 271 N.W. 864 (1937), *on rehearing*, 133 Neb. 420, 275 N.W. 593 (1937); *Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966); *see also Brummond v. Vogel*, 184 Neb. 415, 168 N.W.2d 24 (1969) (court enforced riparian stream rights without proof of pre-Akers Law riparian status); and *Koch v. Aupperle*, 274 Neb. 52, 737 N.W.2d 869 (2007) *overruling Brummond v. Vogel*, 184 Neb. 415, 168 N.W.2d 24 (1969) (proof of pre-Akers Law riparian status required to assert such rights).

⁴⁵ *Wasserburger v. Coffee*, *supra*, 180 Neb. at 158, 141 N.W.2d at 745:

In such cases land has a riparian status only if two requirements are met. First, by common law standards the land was riparian immediately prior to the effective date of the irrigation act of 1895. Second, the land subsequently has not lost its riparian status by severance; consequently it ordinarily is a part of the smallest tract held in one chain of title leading from the owner on April 4, 1895, to the present owner. If a tract was riparian on April 3, 1895, its status was unaffected by the statutes. However, if the tract, or part of it, later lost its riparian status as a result of severance, the nonriparian land cannot regain the riparian status.

All parcels patented prior to April 4, 1895, and located in the five tracts satisfy the test of present unitary possession, but the history of the titles is incomplete. Little has been

established beyond patent and present ownership. In view of the unsettled law the cause should be remanded in order that the parties may adduce additional evidence.

⁴⁶ *Crawford Co. v. Hathaway*, *supra*, 67 Neb. at 363-364, 93 N.W. at 793-794. For further treatment of pre-Akers Law surface water appropriations as vested common law rights, see *In re Water Appropriations D-887 and A-768*, 240 Neb. 337, 341-342, 482 N.W.2d 11, 15 (1992); *City of Scottsbluff v. Winters Creek Canal Co.*, 155 Neb. 723, 730, 53 N.W.2d 543, 548 (1952); *Plunkett v. Parsons*, 143 Neb. 535, 539-541, 10 N.W.2d 469, 471-472 (1943); *State ex rel Cochran v. Cary*, 138 Neb. 163, 167, 292 N.W. 229, 243 (1940); *Enterprise Irr. Dist. v. Willis*, 135 Neb. 827, 831-836, 284 N.W. 326, 329-331 (1939); *City of Fairbury v. Fairbury Mill & Elevator Co.*, 123 Neb. 588, 591, 593, 243 N.W. 774, 776, 777-778 (1932); *Nine Mile Irrigation Co. v. State*, 118 Neb. 522, 528, 532, 225 N.W. 679, 681-681, (1929); *In re Southern Nebraska Power Co.*, 109 Neb. 683, 685-688, 192 N.W. 317, 318-320 (1923); and *Kearney Water & Electric Power Co. v. Alfalfa Irr. Dist.*, 97 Neb. 139, 146, 149 N.W. 363, 366 (1914).

⁴⁷ See *In re Water Appropriations D-887 and A-768*, *supra*, 240 Neb. at 341-342, 482 N.W.2d at 15; *Enterprise Irr. Dist. v. Willis*, *supra*, 135 Neb. at 827, 284 N.W. at 327; and *Winters Creek Canal Co. Willis*, 135 Neb. 825, 826, 284 Neb. 332, 332 (1939).

⁴⁸ See *Northport Irr. Dist. v. Jess*, 215 Neb. 152, 157, 337 N.W.2d 733, 737-738 (1983):

The right of Nebraska citizens to use the waters flowing in the State is protected by Neb. Const. art. XV, §§ 4, 5, 6, and 7, which state as follows:

“Section 4. The necessity of water for domestic use and for irrigation purposes in the State of Nebraska is hereby declared to be a natural want. (Adopted, 1920).”

“Section 5. The use of the water of every natural stream within the State of Nebraska is hereby dedicated to the people of the state for beneficial purposes, subject to the provisions of the following section. (Adopted, 1920).”

“Section 6. The right to divert unappropriated waters of every natural stream for beneficial use shall never be denied except when such denial is demanded by the public interest. Priority of appropriation shall give the better right as between those using the water for the same purpose, but when the waters of any natural stream are not sufficient for the use of all those desiring to use the same, those using the water for domestic purposes shall have preference over those claiming it for any other purpose, and those using the water for agricultural purposes shall have the preference over those using the same for manufacturing purposes. Provided, no inferior right to the use of the waters of this state shall be acquired by a superior right without just compensation therefor to the inferior user. (Adopted, 1920).”

“Section 7. The use of the waters of the state for power purposes shall be deemed a public use and shall never be alienated, but may be leased or otherwise developed as by law prescribed. (Adopted, 1920).”

⁴⁹ “Extant water law in Nebraska remains fundamentally the same as that enacted in 1895.” *Harnsberger & Thornson*, 73. “The appropriation statutes were revised in 1911, but no major changes were made.” *Id.*, citing J.A. Doyle, *Water Rights in Nebraska*, 29 Neb. L. Rev. 385, 389 (1950); see footnote 254 for citation to 1911 amendment adding annual three acre-feet restriction.

⁵⁰ “By act of the Nebraska legislature, all appropriations for irrigation purposes made since 1895 are inseparably appurtenant to specific land, and so follow the land to which the water was intended to be and has been applied.” *United States v. Tilley*, 124 F.2d 850, 857-858 (8th Cir. 1941), citing Neb. Comp. St. 1929, Sec. 46-109, the pertinent provisions of which are now codified at Neb. Rev. Stat. § 46-122(1) (Reissue 2010). “Appropriative rights acquired prior to 1895, however, were not necessarily required to be attached to specific land, and so could, generally speaking, be transferred or assigned for use on other

property. [Citations omitted].” *Id.*; see also, *State ex rel. Blome v. Bridgeport Irr. Dist.*, 205 Neb. 97, 105, 286 N.W.2d 426, 432 (1979) and *Kearney Water & Electric Co.*, 97 Neb. 140, 147-147, 149 N.W.2d 363, 366-367 (1914).

⁵¹ <http://www.dnr.nebraska.gov/swr/wells-and-water>:

People who use Nebraska’s surface water resources are required in most instances to obtain a surface water right/permit from the Nebraska Department of Natural Resources. The permit(s)/water right(s) are approved for a specific location, amount of water and purpose. Surface water rights are administered by NDNR, and are NOT recorded with the deed when land is bought, sold, or transferred. Many permits/rights were originally granted to previous landowners may be one, two or sometimes three generations back. Permits/rights do not transfer with land titles. Often subsequent generations of owners are not familiar or aware of the surface water permit/right for their land. This can be especially true if the land is now irrigated using a groundwater well. While not always the case, it is not uncommon to find landowners with surface water permits/rights who have no idea that a permit/right exists for their land.

State statutes require all landowners to file a written notice with NDNR of any changes in ownership, and/or address for surface water rights and registered groundwater wells. The forms required to update this information are available on NDNR’s website...Forms for both surface water rights and well registrations are also available from NDNR upon request.

⁵² Neb. Rev. Stat. § 46-226 (Reissue 2010).

⁵³ Formation of irrigation districts was authorized shortly before passage of Akers Law. See Laws 1895, Ch. 70, §§ 1-64, pp. 269-304, effective March 26, 1895. The laws currently governing irrigation district formation, operation, discontinuance and merger are codified at Neb. Rev. Stat. Ch. 46, Art. 1 (Reissue 2010). Additional obligations applicable to irrigation canals are codified at Neb. Rev. Stat. §§ 46-244 to 46-273 (Reissue 2010).

⁵⁴ Neb. Rev. Stat. § 46-2,121 (Reissue 2010); see also *Central Nebraska Public and Irr. Dist. v. North Platte Natural Resource Dist.*, 280 Neb. 533, 543, 788 N.W.2d 252, 261 (2010) (“While an irrigation district may hold a surface water appropriation in its own name, it holds that appropriation for the benefit of the owners of land to which the appropriation is attached. In other words, generally speaking, [an irrigation district] is an agent for the purposes of diverting, storing, transporting, and delivering water;” consequently, irrigation and power district lacked standing to object to local NRD’s ground water allocations as insufficient to protect local stream flows in Pumpkin Creek basin that feed into the North Platte River, which in turn provided water to Lake McConaughy).

⁵⁵ See in particular Neb. Rev. Stat. § 46-120 (Reissue 2010) (“The board shall have the power and it shall be its duty to manage and conduct the business affairs of the district, make and execute all necessary contracts, employ such agents, officers, and employees as may be required and prescribe their duties, establish equitable bylaws, rules and regulations for the distribution and use of water among the owners of such lands, and generally to perform all such acts as shall be necessary to fully carry out the purposes of sections 46-101 to 46-1,111”).

This obligation has been treated as an ongoing duty to construct and maintain laterals required to deliver water in usable quantities to all irrigable lands in the district. See *State ex rel. Clark v. Gerring Irr. Dist.*, 109 Neb. 642, 192 N.W.2d 212 (1923) (duty remained enforceable despite twenty years of nonperformance). Note, however, that efforts to enforce the same statutory duty were deemed time-barred in *DaLaet v. Blue Creek Irr. Dist.*, 23 Neb. App. 106, 868 N.W.2d 483 (2015), with no mention of the *Gerring* case.

Other important provisions include Section 46-122 (Reissue 2010) (irrigation district has no power to cancel or terminate the water rights, nor can it suspend delivery of water except for nonpayment of taxes and assessments as provided by statute and the by-laws of the district; also identifies lawful actions district may take in times of shortage); Section 41-160 (statutory liability for failure to deliver water); and Section 46-157 (authorizes and obligates “water commissioners,” meaning the chairmen of the board of directors of each affected district, to apportion natural stream flow in times of shortage, by rotating access among the various districts).

⁵⁶ “The only classification of subterranean waters made by the common law is based on the method of transmission through the ground, and is that they belong to one of only two classes, namely: (1) Underground currents of water flowing in known and defined channels or watercourses; (2) water passing through the ground beneath the surface in channels which are undefined and unknown.” *Nourse v. Andrews*, 200 Ky. 467, 255 S.W. 84, 86 (1923); *see also Olson v. City of Wahoo*, 124 Neb. 802, 810, 248 N.W. 304, 307-308 (1933) (“There is a distinction made between underground waters flowing in known and well-defined channels, such as the water flowing in the gravel bed in Todd Valley, and also underground waters, the channels of which are undefined and unknown, and it is held that the principles of law governing the former are not applicable to the latter. [Citation omitted]”). *For additional authorities, see Subterranean and percolating waters; springs and wells*, 55 ALR 1385, 1386-1387 (1928), *supplemented*, 109 ALR 395, 397 (1937).

⁵⁷ “It is well settled that unless it is shown that the underground water flows in a defined and known channel it will be presumed to be percolating water.” *Clinchfield Coal Corp. v. Compton*, 148 Va. 437, 448, 139 S.E. 308, 312 (1927); *accord, Ball v. United States*, 1 Cl. Ct. 180, 184 (1982); *For additional authorities, see Subterranean and percolating waters; springs and wells, supra*, 55 ALR at 1387-1388, *supplemented*, 109 ALR at 397.

⁵⁸ “Waters flowing in defined and known subterranean stream or channel are generally governed by the same rules applicable to natural watercourses or surface waters and owner of land beneath which such waters flow has the same rights respecting those waters as a riparian owner with respect to a surface stream across his property.” *Ball v. United States, supra*, 1 Cl. Ct. at 184; *for additional authorities, Subterranean and percolating waters; springs and wells, supra*, 55 ALR at 1487-1498, *supplemented*, 109 ALR at 415-416.

⁵⁹ The Nebraska Supreme Court acknowledged this point of law in *In re Metropolitan Utilities District of Omaha*, 179 Neb. 783, 800-801, 140 N.W.2d 626, 631 (1966) (emphasis added):

The common law rights of riparian owners have been modified in this state by what is known as the American doctrine. This doctrine has been defined as follows: ‘The American, as distinguished from the English rule, is that, **while the owner of the land is entitled to appropriate subterranean or other waters accumulating on his land, which thereby becomes a part of the realty**, he cannot extract and appropriate them in excess of a reasonable and beneficial use upon the land he owns, unconnected with the beneficial use of the land, especially if the exercise of such use in excess of the reasonable and beneficial use is injurious to others, who have **substantial rights to the water.**’ [Citation omitted].

⁶⁰ “The common law regarded the fee simple owner of the land as the owner of everything above and below the surface from the sky to the center of the earth, expressed in the maxim, *Cujus est solum, ejus est usque ad coelom et ad inferos*, and this doctrine is adhered to in England. *Acton v. Blundell*, 12 Mees & W. 324, 13 L.J. Exch. 28; *Chasemore v. Richards*, 7 H.L.Cas. 349. Under this doctrine, the owner of the land may make any use he pleases of underlying percolating waters, and may even cut them off maliciously without liability to his neighbor.” *Clinchfield Coal Corp. v. Compton*, 148 Va. 437, 451-452, 139 S.E. 308, 311-312 (1927). *For further discussion of the English Rule, see Subterranean and percolating waters; springs and wells*, 55 ALR 1385, 397-399 (1928), *supplemented* 109 ALR 397, 397-398 (1937); *see also Dellapenna, J.W., A Primer on Groundwater Law*, 49 Idaho L. Rev. 265, 271-276 (2013) (discussing evolution of the “absolute dominion” rule, which confers ownership over waters beneath real property as

well as the land itself; and the “rule of capture” theory, conferring an ownership interest in groundwater upon extraction).

⁶¹ *Williams v. Ladue*, 161 Pa. 283, 287-288 (1897); *see also Mosier v. Caldwell*, 7 Nev. 363 (1872) and *Dehil v. Youmans*, 50 Barb. 316 (N.Y.1867).

⁶² *Beatrice Gas Co. v. Thomas*, 41 Neb. 662, 59 N.W.2d 925, 927-928 (1894) (Court implicitly if not expressly recognizes ownership interest in ground water by extending common law real property nuisance principles to subsurface water contamination issue).

⁶³ “Under the English rule of water law—also referred to as the absolute ownership rule—a landowner had absolute ownership of the waters under his or her land. Therefore, the owner could withdraw any quantity of water for any purpose without liability, even though the result was to drain water from beneath surrounding lands.” *Spear T Ranch, Inc. v. Knaub*, *supra*, 269 Neb. at 186, 691 N.W.2d at 126, *citing Prather v. Eisenmann*, 200 Neb. 1, 261 N.W.2d 766 (1978) and *Cline v. American Aggregates*, 15 Ohio St.3d 384, 474 N.E.2d 324 (1984); *see also Metropolitan Utilities District of Omaha v. Merritt Beach Co.*, 179 Neb. 783, 797, 140 N.W.2d 626, 635 (1966); *Olson v. City of Wahoo*, 124 Neb. 802, 248 N.W. 304, 307-308 (1933); and *Beatrice Gas Co. v. Thomas*, 41 Neb. 662, 59 N.W.2d 925, 927-928 (1894), *quoting Kinnaird v. Standard Oil Co. Oil Co.*, 89 Ky. 468, 12 S.W. 937, 938-939 (1890).

⁶⁴ *Olson v. City of Wahoo*, 124 Neb. 802, 248 N.W. 304, 307-308 (1933).

⁶⁵ “From 1931 to 1940 Nebraska suffered from the most severe drought of record. Only once, in 1938, was the amount of precipitation during the ten year period above the mean, and total rainfall deficiency was 45.2 inches. This, together with a nation-wide depression, was ruinous.” R.S. Harnsberger, J.C. Oeltjen, and R.J. Fischer, *Groundwater: From Windmills to Comprehensive Public Management*, 52 Neb. L. Rev. 179, 190 (1973), *citing* M. Lawson, A. Reiss, R. Phillips, and K. Livingston, *Nebraska Droughts: A Study of Their Last Chronological and Spatial Extent with Implications for the Future* 6-7, 74 (Dept. of Geography Occasional paper No. 1, U. of Neb. 1971). The University of Nebraska – Lincoln’s National Drought Mitigation Center – which opened in 1995 -- breaks down the 1930’s drought into four discrete episodes: “Although the 1930s drought is often referred to as if it were one episode, there were at least 4 distinct drought events: 1930–31, 1934, 1936, and 1939–40 (Riebsame et al., 1991).” *See* <http://drought.unl.edu/droughtbasics/dustbowl/droughtinthedustbowlyears.aspx>.

⁶⁶ *Olson v. City of Wahoo*, 124 Neb. 802, 811, 248 N.W. 304, 308 (1933) (“The American rule is that the owner of land is entitled to appropriate subterranean waters found under his land, but he cannot extract and appropriate them in excess of a reasonable and beneficial use upon the land which he owns, especially if such use is injurious to others who have substantial rights to the waters, and if the natural underground supply is insufficient for all owners, each is entitled to a reasonable proportion of the whole, and while a lesser number of states have adopted this rule, it is in our opinion, supported by the better reasoning”).

⁶⁷ *Id.*

⁶⁸ *See, e.g., Spear T Ranch, Inc. v. Knaub*, 269 Neb. 177, 192-193, 691 N.W.2d 116, 131 (2005); *Prather v. Eisenmann*, 200 Neb. 1, 6, 261 Neb. 766, 769 (1978); *Metropolitan Utilities District of Omaha v. Merritt Beach Co.*, 179 Neb. 783, 800-801, 140 N.W.2d 626, 637 (1966); *Luchsinger v. Loup River Public Power District* 140 Neb. 179, 182, 299 N.W. 549, 550-551 (1941); and *Osterman v. Central Nebraska Public Power & Irr. District*, 131 Neb. 356, 365, 268 N.W. 334, 338 (1936); *for further discussion, see Harnsberger & Thorson*, pp. 210-226.

⁶⁹ A. Dan Turlock, *Law of Water Rights and Resources* § 4.8 (July 2016 Update).

⁷⁰ *Olson v. City of Wahoo*, *supra*, 124 Neb. at 811, 248 N.W. at 308.

⁷¹ A. Dan Turlock, *Law of Water Rights and Resources* § 4.14 (July 2016 Update).

⁷² See for example *Katz v. Walkinshaw*, 141 Cal. 116, 74 P. 766 (1903), the seminal case first announcing the correlative rights doctrine. In addition to recognizing a landowner’s proprietary interest in ground water, the California Supreme Court rejected the notion that correlative rights would be too difficult for a court to administer:

The objection that this rule of correlative rights will throw upon the court a duty impossible of performance—that of apportioning an insufficient supply of water among a large number of users—is largely conjectural. No doubt cases can be imagined where the task would be extremely difficult, but, if the rule is the only just one—as we think has been shown—the difficulty in its application in extreme cases is not a sufficient reason for abandoning it and leaving property without any protection from the law.
141 Cal. at 136-137, 74 P. at 772.

⁷³ In *Katz v. Walkinshaw*, large, later-in-time pumpers argued in favor of the absolute dominion rule, which would leave smaller, preexisting agricultural pumpers without a remedy for the depletion of their underlying ground water supplies. The California Court, after extended analysis, preferred to recognize an enforceable property interest in ground water, belonging to each overlying landowner. In doing so, it offered the following criticism of the absolute dominion rule:

We do not see how the doctrine contended for by defendant [absolute dominion] could ever become a rule of property to any value. Its distinctive feature is the proposition that no property rights exist in such waters except while they remain in the soil of the landowner; that he has no right either to have them continue to pass into his land as they would under natural conditions, or to prevent them from being drawn out of his land by an interference with natural conditions on neighboring land. Such right as he has is therefore one which he cannot protect or enforce by resort to legal means, and one which he cannot depend on to continue permanently or for any definite period.

141 Cal. at 133, 74 P. at 771; see also *Maerz v. U.S. Steel Corp.*, 116 Mich. App. 710, 714-715, 323 N.W.2d 524, 527 (1982) (“The English rule was, however, not universally popular in American courts. One problem with the rule was that it immunized a landowner who removed the percolating water for purely malicious reasons. [Citation omitted]. Additionally, although neighboring landowners theoretically had a property right in the percolating waters lying beneath their lands, the overlying owner with the biggest pump and deepest well could control the water otherwise available to both”).

⁷⁴ *Spear T Ranch, Inc. v. Knaub*, *supra*, 269 Neb. at 192-193, 691 N.W.2d at 131; *Prather v. Osterman*, *supra*, 200 Neb. at 6, 261 Neb. at 769; and *Luchsinger v. Loup River Public Power District*, *supra*, 140 Neb. at 182, 299 N.W. at 550-551; for further discussion, see *Harnsberger & Thorson*, pp. 210-226.

⁷⁵ Laws 1982, LB 375, § 1, p. 305 (“Every landowner shall be entitled to a reasonable and beneficial use of the ground water underlying his or her land subject to the provisions of Chapter 46, article 6, and the correlative rights of other landowners when the ground water supply is insufficient to meet the reasonable needs of all users”). Without mincing words, the legislature recognized the common law ownership interest in groundwater and the concomitant right of landowners to extract such waters at their discretion, subject to: (a) the privately enforceable rights of other landowners under the American reasonable use rule and the correlative rights doctrine; and (b) the registration, spacing and location provisions then set out in Article 6.

The legislature did not declare that groundwater ownership and pumping rights were further subject to the GWPMA until 1996: “Every landowner shall be entitled to a reasonable and beneficial use of the ground water underlying his or her land subject to the provisions of Chapter 46, article 6, and the *Nebraska Ground Water Management and Protection Act* and the correlative rights of other landowners when the ground water supply is insufficient to meet the reasonable needs of all users.” See Laws 1996, LB

108, § 8 (emphasis added). The LB 108 version is presently codified at Neb. Rev. Stat. § 46-702 (Reissue 2010).

The effective date of LB 108 may well play a key role in vested rights analysis, as applied to irrigation wells.

⁷⁶ For general discussion of preliminary irrigation well legislation, see *In re Central Nebraska Public Power and Irr. Dist.*, 270 Neb. 108, 113-114, 699 N.W.2d 372, 376 (2005) and *Metropolitan Utilities Dist. v. Merritt Beach Co.*, 179 Neb. 783, 140 N.W.2d 626 (1966). These early legislative conditions on irrigation wells are now codified as amended at Neb. Rev. Stat. §§ 46-601 to 46-613.02 (Reissue 2010) (registration and spacing requirements); Sections 46-635 to 46-637 (location restrictions to avoid interference with surface stream flows); and Sections 46-651 to 46-655.01 (additional potential spacing requirements).

⁷⁷ See Laws, 1975, LB 577, §§ 1-24, pp. 1145-1158, originally codified at Neb. Rev. Stat. 46-656 to 674 (1943) (1975 Supplement). In addition to Sections 46-656 to 46-674, the GWMA also included Sections 2-3225, 46-602, 46-603, 46-629, and 46-630. See *Neb. Rev. Stat. (1943)* (1975 Supplement), p. 457 (note by Revisor of Statutes). The GWMA, as amended and now known as GWMPA is presently codified at Neb. Rev. Stat. §§ 46-701 to 46-756 (Reissue 2010 & Cum. Supp. 2014); see also Carl A.P. Fricke & Darryll T. Pederson, *Ground-Water Resource Management in Nebraska*, 17 *Ground Water* 544 (1979) (brief overview of development of ground water irrigation in Nebraska and GWMA's original provisions).

⁷⁸ Laws 1981, LB 146, §§ 4-16, pp. 419-428.

⁷⁹ See *Ligenfelter v. Lower Elkhorn Natural Resources District*, 294 Neb. 46, 881 N.W.2d 892 (2016); and *Bamford v. Upper Republican Natural Resources District*, 245 Neb. 299, 512 N.W.2d 642 (1994), *cert. denied*, 513 U.S. 874 (1994).

⁸⁰ See *Clark v. Cambridge & A. Irr. & Imp. Co.*, 45 Neb. 798, 807, 64 N.W. 239, 241 (1895) (“The provision of Act March 27, 1889, as amended by Act 1893, abolishing riparian rights in all streams over 20 feet in width, without making compensation to the riparian owners, is invalid”); see also *Slattery v. Harley*, 58 Neb. 575, 79 N.W. 151, 152 (1899); *Crawford Co. v. Hathaway*, 67 Neb. 325, 93 N.W. 781 (1903), *overruled in part by Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966); *Meng v. Coffee*, 67 Neb. 500, 503, 93 N.W. 713, 714 (1903), *appeal after remand, Brewster v. Meng*, 76 Neb. 560, 107 N.W. 752 (1906); *McCook Irrigation & Water Power Co. v. Crews*, 70 Neb. 109, 96 N.W. 996 (1903), *reversed on rehearing*, 70 Neb. 115, 102 Neb. 249 (1905); *Cline v. Stock*, 71 Neb. 70, 98 N.W. 454 (1904) *rev'd*, 71 Neb. 79, 102 N.W. 265 (1905); *In re Platte River Public Power & Irrigation Dist.*, 132 Neb. 292, 271 N.W. 864 (1937), *on rehearing*, 133 Neb. 420, 275 N.W. 593 (1937); *Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966); see also *Brummond v. Vogel*, 184 Neb. 415, 168 N.W.2d 24 (1969) (court enforced riparian stream rights without proof of pre-Akers Law riparian status); and *Koch v. Aupperle*, 274 Neb. 52, 737 N.W.2d 869 (2007) *overruling Brummond v. Vogel*, 184 Neb. 415, 168 N.W.2d 24 (1969) (proof of pre-Akers Law riparian status required to assert such rights).

⁸¹ See *In re Water Appropriations D-887 and A-768*, 240 Neb. 337, 341-342, 482 N.W.2d 11, 15 (1992); *City of Scottsbluff v. Winters Creek Canal Co.*, 155 Neb. 723, 730, 53 N.W.2d 543, 548 (1952); *Plunkett v. Parsons*, 143 Neb. 535, 539-541, 10 N.W.2d 469, 471-472 (1943); *State ex rel Cochran v. Cary*, 138 Neb. 163, 167, 292 N.W. 229, 243 (1940); *Enterprise Irr. Dist. v. Willis*, 135 Neb. 827, 831-836, 284 N.W. 326, 329-331 (1939); *City of Fairbury v. Fairbury Mill & Elevator Co.*, 123 Neb. 588, 591, 593, 243 N.W. 774, 776, 777-778 (1932); *Nine Mile Irrigation Co. v. State*, 118 Neb. 522, 528, 532, 225 N.W. 679, 681-681, (1929); *In re Southern Nebraska Power Co.*, 109 Neb. 683, 685-688, 192 N.W. 317, 318-320 (1923); *Kearney Water & Electric Power Co. v. Alfalfa Irr. Dist.*, 97 Neb. 139, 146, 149 N.W. 363, 366 (1914); and *Crawford Co. v. Hathaway*, 67 Neb. 325, 356-357, 364, 93 N.W. 781, 791-792, 794 (1903).

⁸² See Neb. Laws (1895) Ch. 93a, § 42; 7 Neb. Comp. Stat. (1895) §5485, p. 1109 (“The water of every natural stream not heretofore appropriated, within the state of Nebraska, is hereby declared to be the property of the public, and is dedicated to the use of the people of this state, subject to appropriation as hereinbefore provided”).

⁸³ See *Kirk v. State Board of Irrigation*, 90 Neb. 627, 631, 134 N.W. 167, 169-170 (1912) (“In this state, the water of running streams is *publici juris*; its beneficial use belongs to the public and is controlled by the state in its sovereign capacity”).

⁸⁴ See *Loup River Public Power Dist. v. North Loup River Public Power & Irrigation Dist.*, 142 Neb. 141, 152-153, 5 N.W.2d 240, 247-248 (1942).

⁸⁵ See for example, *Clark v. Cambridge & A. Irr. & Imp. Co.*, *supra*, 45 Neb. at 807, 64 N.W. at 241 (“at common law, every riparian proprietor, as an incident to his estate, is entitled to the natural flow of the water of running streams through his lands, undiminished in quantity and unimpaired in quality, although all have the right to the reasonable use thereof for the ordinary purposes of life...and any unlawful diversion thereof is an actionable wrong;” assuming the 1889 Irrigation Act was intended to abolish vested riparian rights without compensation, “it is a clear invasion of private rights, and within the prohibition of the constitution. The right of a riparian proprietor, as such, is property, and, when vested, can be destroyed or impaired only in the interest of the general public, upon full compensation, and in accordance with established law”).

⁸⁶ See for example *Crawford Co. v. Hathaway*, *supra*, 67 Neb. at 356-357, 364, 93 N.W. at 791-792, 794 (“The court will take judicial notice of the fact that since the early settlements of the western portions of the state, where irrigation has been found essential to successful agriculture, a custom or practice has existed of appropriating and diverting waters from the natural channels thereof into irrigation canals, and the application of such waters to the soil for agricultural purposes. Whether vested rights have been acquired thereby must depend on the facts and circumstances as disclosed in any particular case...the appropriator acquires title by appropriation and application to some beneficial use, and of which he cannot be deprived except in some of the modes prescribed by law”).

⁸⁷ See, e.g., *State ex rel. Cochran v. Cary*, *supra*, 138 Neb. at 167, 292 N.W. at 243; *Enterprise Irr. Dist. v. Willis*, *supra*, 135 Neb. at 836, 284 N.W. at 329-331; *In re Southern Nebraska Power Co.*, *supra*, 109 Neb. at 683, 192 N.W. at 317; *Nine Mile Irrigation Co. v. State*, *supra*, 118 Neb. at 528, 225 N.W. at 681-682.

⁸⁸ “The first irrigation laws...adopted in 1877 and 1889...placed no limitations upon the quantity of water that could be appropriated, save and except that it must be for a useful purpose and within the capacity of the diversion works. Laws 1877, p. 168; Laws 1889, c. 68, p. 503.” *In re Metropolitan Utilities District of Omaha*, 179 Neb. 783, 798, 140 N.W.2d 626, 635 (1966); *accord*, *Enterprise Irr. Dist. v. Willis*, *supra*, 135 Neb. at 829, 284 N.W. at 328.

⁸⁹ See Neb. Laws 1895, ch.93a, § 20; 7 Neb. Compiled Statutes, § 5447, p. 1102.

⁹⁰ See *In re Water Appropriations D-887 and A-768*, *supra*, 240 Neb. at 341-342, 482 N.W.2d at 15; *Enterprise Irr. Dist. v. Willis*, *supra*, 135 Neb. at 827, 284 N.W. at 327; and *Winters Creek Canal Co. v. Willis*, 135 Neb. 825, 826, 284 Neb. 332, 332 (1939).

⁹¹ Compare with *Baeth v. Hoisveen*, 157 N.W.2d 728 (N.D. 1968) (a landowner of premises overlying ground water, be it percolating or in a more or less well-defined stream, acquires a vested right following withdrawal and application of said ground water to a beneficial use) and *Undlin v. City of Surrey*, 262 N.W.2d 742 (N.D. 1978); see also *Volkman v. City of Crosby*, 80 S.D. 517, 127 N.W.2d 708 (1963) (where landowner has applied percolating subterranean waters to reasonable beneficial use on his overlying land and thereby acquired vested right to such use, state may not by subsequent legislation authorize impairment or destruction of such use without compensation); and *McNamara v. City of Rittman*, 107 Ohio

St.3d 243, 835 N.E.2d 640 (2005) (landowners have a property interest in the groundwater underlying their land and that governmental interference with that right can constitute an unconstitutional taking).

⁹² “The American rule is that the owner of land is entitled to appropriate subterranean waters found under his land, but he cannot extract and appropriate them in excess of a reasonable and beneficial use upon the land which he owns, especially if such use is injurious to others who have substantial rights to the waters, and if the natural underground supply is insufficient for all owners, each is entitled to a reasonable proportion of the whole, and while a lesser number of states have adopted this rule, it is in our opinion, supported by the better reasoning.” *Spear T Ranch, Inc. v. Knaub*, 269 Neb. 177, 192-193, 691 N.W.2d 116, 131 (2005), quoting *Olson v. City of Wahoo*, 124 Neb. 802, 811, 248 N.W. 304, 308 (1933). “Nebraska, in *Olson*, adopted the rule of reasonable use with the addition of the California doctrine of apportionment in time of shortage.” *Prather v. Osterman*, 200 Neb. 1, 6, 261 Neb. 766, 769 (1978). The *Olson* rule amounts to a “modified reasonable use rule.” *Id.* “Without embarkation on an ontological or metaphysical investigation, it is clear that the right to use ground water is an attribute of owning fee simple title to land overlying a source of ground water and is inseparable from the land to which it applies. We conclude that the right of an owner of overlying land to use ground water is an appurtenance constituting property protected by Neb. Const. art. I, § 21: ‘The property of no person shall be taken or damaged for public use without just compensation therefor.’” *Sorensen v. Lower Niobrara Natural Resources Dist.*, 221 Neb. 180, 191-192, 376 N.W.2d 539, 549 (1985).

We note here that a water right “inseparable” from the land is a real property right. See *Crawford Co. v. Hathaway*, 67 Neb. 325, 326, 93 N.W. 781, 781 (1903) (Syllabus: “A riparian's right to the use of the flow of the stream passing through or by his land is a right inseparably annexed to the soil, not as an easement or appurtenance, but as a part and parcel of the land; such right being a property right, and entitled to protection as such, the same as private property rights generally”), *partially overruled on other grounds*, *Wasserburger v. Coffee*, 180 Neb. 149, 141 N.W.2d 738 (1966).

Pre-GWMPA cases make clear that landowners retained a proprietary interest in ground water under the *Olson* rule. See *Osterman v. Central Nebraska Public Power and Irrigation District*, 131 Neb. 356, 364-365, 268 N.W. 334, 338 (1936) (subterranean irrigation is a “valuable right” of surface landowners recognized and protected by *Olson* rule; therefore, surface owners have standing to object to inter-basin transfer of Platte River waters that would lower water table beneath their properties); and *Luchsinger v. Loup River Public Power Dist.*, 140 Neb. 179, 182, 299 N.W. 549, 550-551 (1941) (sub-irrigation is a valuable property right, the destruction by an irrigation and power district constitutes a compensable taking under the Nebraska constitution; *Olson* rule “answers for itself as a sound proposition of law essential to the protection of property rights of private individuals and is consistent with the Constitution and with morality and justice”); see also *In re Metropolitan Utilities District of Omaha*, 179 Neb. 783, 800-801, 140 N.W.2d 626, 631 (1966) (“The common law rights of riparian owners have been modified in this state by what is known as the American doctrine. This doctrine has been defined as follows: ‘The American, as distinguished from the English rule, is that, while the owner of the land is entitled to appropriate subterranean or other waters accumulating on his land, which thereby becomes a part of the realty, he cannot extract and appropriate them in excess of a reasonable and beneficial use upon the land he owns, unconnected with the beneficial use of the land, especially if the exercise of such use in excess of the reasonable and beneficial use is injurious to others, who have *substantial rights to the water.*’ [Citation omitted]”).

Post-GWMPA cases also treat the extraction of ground water as a property right. See *Prather v. Osterman*, 200 Neb. 1, 11, 261 Neb. 766, 769 (1978) (extraction of ground water for domestic purposes is “a valuable property right”); *In re Application U-2*, 226 Neb. 594, 604-605, 413 N.W.2d 290, 298 (1987) (“an overlying property owner has a protected right in the use of ground water, as defined in § 46-657”); *Hagan v. Upper Republican Natural Resource District*, 261 Neb. 312, 318, 622 N.W.2d 627, 631 (2001) (depletion of underlying aquifer conferred standing on landowners -- previously denied irrigation variances -- to challenge variances granted to others to conduct hog confinement operations); and *Sorensen v. Lower Niobrara Natural Resources Dist.*, *supra*.

⁹³ See in general *Katz v. Walkinshaw*, 141 Cal. 116, 74 P. 766 (1903), the seminal case first announcing the correlative rights doctrine. For modern analysis of the ownership interest in ground water, see *McNamara v. City of Rittman*, 107 Ohio St.3d 243, 835 N.E.2d 640 (2005), discussing the meaning and effect of *Cline v. American Aggregates*, 15 Ohio St.3d 384, 474 N.E.2d 324 (1984). *Cline*, of course, played a dispositive role in persuading the Nebraska Supreme Court's to adopt Restatement (Second) of Torts § 858 as the law governing potential liability for ground water pumping operations in Nebraska. See *Spear T Ranch, Inc. v. Knaub*, 269 Neb. 177, 186, 189-190, and 193-194, 691 N.W.2d 116, 127, 129, and 132 (2005).

⁹⁴ Neb. Rev. Stat. §§ 46-638 to 46-650 (Reissue 2010).

⁹⁵ See *Sorensen v. Lower Niobrara Natural Resources District*, 221 Neb. 180, 189, 376 N.W.2d 539, 547 (1985) (rejecting Lower Niobrara NRD's post-GWMPA argument that since landowners cannot own ground water, they are not entitled to recover damages for impairment of their right to use water in an eminent domain proceeding).

⁹⁶ “A ‘patent’ is the conveyance by which the [federal government] passes its title to portions of the public domain.” *Shumway v. United States*, 199 F.3d 1093, 1096 (9th Cir. 1999), quoting *Smelting Co. v. Kemp*, 104 U.S. 636, 640 (1881). “A patent does not merely pass title, like a deed, but operates as an official declaration of title which is, with limited exceptions, unassailable and not rebuttable.” *Id.*, citing *Smelting Co. v. Kemp*, *supra*, 104 U.S. at 600-641. Federal land patents, among other things, must be construed and enforced in accordance with and according to the laws and regulations in effect at the time of their issue. See *Crow Tribe of Indians v. Peters*, 835 F. Supp.2d 985, 990 (D. Mont. 2011)(citing multiplicity of supporting U.S. Supreme Court opinions); see also *Hash v. United States*, 403 F.3d 1308, 1315-1316 (Fed. Cir. 2005); *Capreal, Inc. v. United States*, 99 Fed. Cl. 133, 141 (Ct. Fed. Cl. 2011); and *Thompson v. United States*, 101 Fed. Cl. 416, 433-434 (Ct. Fed. Cl. 2011); see also *Marvin M. Brandt Revocable Trust v. United States*, ___ U.S. ___, 134 U.S. 1257 (2014) (construing railroad rights of way under General Railroad Right-of-Way Act of 1875 in accordance with basic common law principles).

⁹⁷ Act March 3, 1877, c. 107, s 1, 19 Stat. 377, now codified at 43 U.S.C.A. 321.

⁹⁸ Compare with *Baeth v. Hoisveen*, 157 N.W.2d 728 (N.D. 1968); *Undlin v. City of Surrey*, 262 N.W.2d 742 (N.D. 1978); and *Volkman v. City of Crosby*, 80 S.D. 517, 127 N.W.2d 708 (1963); see also *McNamara v. City of Rittman*, 107 Ohio St.3d 243, 835 N.E.2d 640 (2005).