

The Republican, the Platte and Pumpkin Creek: Current Nebraska Water Policy Issues

J. David Aiken, Professor of Agricultural Economics (Water Law Specialist), UNL

Potential conflicts between surface water users and ground water users are posing perplexing challenges to Nebraska policy makers. Surface water law is the rule of priority, "first in time is first in right," as administered by the Nebraska Department of Natural Resources (DNR). Ground water is primarily the rule of correlative rights, as administered by local natural resources districts (NRDs). Traditionally ground water irrigators have been subject to few restrictions on drilling new wells or how much water could be used (except in the Upper Republican NRD in southwest Nebraska). Now the DNR can ban new wells in overappropriated and fully-appropriated river basins, and has done so in much of the Republican, North Platte, and Central Platte river basins. Nebraska water law has always been subject to interstate agreements, such as the Republican River Compact (RRC), and federal laws, such as the Endangered Species Act.

Until recently, Nebraska water law has treated surface water and ground water as being separate and distinct, despite the hydrologic connection. However, the 1997 Platte River Cooperative Agreement and the 2002 settlement of the RRC litigation have forced Nebraska to begin recognizing the impact that the pumping of hydrologically-connected ground water (HC ground water) has on streamflow.

Republican River issues

Under the 1943 RRC, Nebraska, Colorado and Kansas agree to share the flow of the Republican River. In the RRC, Colorado is allocated 54,100 acre-feet per year (AF/yr) or 11%, Kansas 190,300 AF/yr or 40%, and Nebraska 234,500 AF/yr or 49%. (An acre-foot of water is 325,851 gallons, enough water to cover an acre of land to a depth of one foot). If the river flow increased or decreased by 10% or more in a particular year, the acre-feet allocations to the states would be adjusted accordingly. Kansas sued Nebraska and Colorado over whether well pumping should be counted against a state's allocation, with the federal courts ultimately ruling in the affirmative. Under the RRC litigation settlement, the basic allocations do not change but are based on five-year rolling averages rather than annual streamflow amounts. In dry years, allocations are based on three-year averages. Nebraska is given wide latitude in reducing consumptive use in dry years to achieve compact compliance.

The current RRC water accounting process began in 2003. Colorado and Nebraska both are over their allocation, but Kansas is significantly under its allocation. For 2003-04, Colorado's allocation was 21,490 AF/yr, its water use was 33,570 AF/yr, and its overuse was 12,090 AF/yr, or 44% of its allocation. Nebraska's 2003-04 allocation was 216,610 AF/yr, its water use was 256,720 AF/yr and its overuse was 31,030 AF/yr, or 14% of our allocation. (Nebraska received an imported water supply credit of 10,080 AF/yr.) Kansas's 2003-04 allocation was 152,620 AF/yr, its use was only 43,520 AF/yr and its unused allocation was 109,100 AF/yr, or 71% of its allocation. For the years 2003-05, Nebraska's cumulative overuse is 104,089 AF (34,696 AF/yr). This period has been one of intense drought, and does not indicate whether Nebraska will continue to overuse during more normal precipitation periods.

Given that Kansas is using less than half its allocation (even during a drought), Kansas is likely to give Nebraska a reasonable amount of time to make up our overuse deficit, so long as we progress towards meeting that goal. With the current NRD ground water irrigation water use restraints in place, Nebraska might use less than its full allocation in wet years. While this would reduce the cumulative deficit, it is likely that water use reductions will be required to balance our RRC water allocation and our water use over time. Water use reduction options include reducing ground water allocations and use, reducing irrigated acreage, and purchasing and retiring irrigation water rights. Some options have been

evaluated by UNL Agricultural Economist Ray Supalla (see *The Cost of Reducing Irrigation* in the economics section of this book). In the end, the relative cost per acre-foot of consumptive use reduced of various options should be compared so that policy makers understand the relative costs. Finally, the DNR (or UNL) should estimate baseline water use in an average year, given current NRD and DNR irrigation water restrictions. This would help policy makers evaluate how much consumptive use needs to be permanently reduced in order to bring our long-term water availability and use in the Republican into balance.

If significant funding is required to ultimately to meet our RRC obligations, the question becomes--where does the money come from? Options include local or state-wide property taxes, local or state-wide water use fees, the state general fund, or some combination of the above. The funding issue may be the most difficult aspect of this policy issue.

Platte River issues

The Platte has similar issues to the Republican, but significant differences as well. If Nebraska implements the Platte River Habitat Recovery Program, we will have to offset the stream depletion effects from hydrologically-connected wells first used after July 1, 1997. Different cost estimates have been made. An important point is that Nebraska will have at least 13 years within which to implement the program, and over which to spread the costs. Funding options are similar to those identified relative to RRC compliance. If Nebraska elects not to participate in the Platte habitat recovery program, all HC wells will be subject to offset requirements, not just those "junior" to July 1, 1997.

Pumpkin Creek

Portions of the North Platte river basin have been identified by the DNR as over-appropriated (OA). Conflicts between users of surface water and HC ground water within Pumpkin Creek have been brought to court, with the Nebraska Supreme Court ruling in 2005 that ground water users are liable if their use unreasonably interferes with surface water use. *Spear T Ranch v. Knaub*, 269 Neb. 177 (2005). See generally, J. David Aiken, "Hydrologically-Connected Ground Water, §858 and the *Spear T* Decision," 84 *Nebraska Law Review* 962-96 (2006). The Spear T Ranch is suing upstream ground water users on Pumpkin Creek for interfering with the Ranch's surface water appropriations. The Central Nebraska Public Power & Irrigation District is considering a similar lawsuit to protect North Platte River inflows into Lake McConaughy from HC well pumping.

One option is to let these lawsuits run their course. A second option is to frankly acknowledge that we as a state have too long ignored the interrelationship between surface water and HC ground water, and establish a compensation system for surface appropriators in OA basins whose rights have been lost to or harmed by HC well pumping. While such a compensation system would have strong equity appeals, it would likely require the DNR to adjudicate all the surface water rights and HC ground water wells in OC basins as a prelude to determining any rights to compensation. The DNR is severely over-taxed as it is in attempting to deal with RRC compliance and LB962 implementation. As a minimum, the Unicameral should consider whether the DNR needs additional staff to help the agency cope with its new water management responsibilities.