

World-Herald editorial: Nebraska sets great example on water

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Californians have expressed interest. So have Floridians. The same for folks in Utah, Indiana and Oklahoma.

The focus of their interest: Nebraska's system of natural resources districts to regulate groundwater, with oversight of rivers and lakes by the state Department of Natural Resources.

The state DNR and local NRD officials are receiving increasing inquiries on how Nebraska approaches water management, the Associated Press recently reported. It's not hard to see why.

Nebraska leads the nation with more than 8.2 million acres under irrigation, yet it's only the No. 6 state in annual water usage for agriculture — a reflection of a sound water management system and significant irrigation efficiency.

Nebraska has challenges, certainly. The state has areas of water decline. Irrigation needs to embrace even greater efficiency. Conditions in the Republican River basin required major action.

Still, U.S. Geological Survey analysis shows that since the 1950s, the amount of water in underground storage in Nebraska has fallen by only 0.1 percent. That's the lowest of any Plains state.

Three key factors explain this positive result. First, higher-than-average precipitation over the past three decades. Second, progress in strengthening irrigation efficiency. "It used to take 30 inches of water an acre to irrigate crops," says John Winkler, general manager of the Papio-Missouri River NDR. "Now it takes 8 to 12, with the use of groundwater and center pivot irrigation systems."

The third factor: Nebraska's NRDs, in coordination with local, state and federal authorities.

Nebraska has an advantage, too, by being able to draw on the water-science expertise of the University of Nebraska, which hosts the National Drought Mitigation Center and the Daugherty Water for Food Institute.

Nebraska's unique NRD system arose gradually through a series of steps going back to the 1930s. Nebraska created its first soil conservation districts in 1937, and in 1949 it became the first state west of the Mississippi to consolidate all of its agricultural land into soil conservation districts.

In 1957, a Department of Water Resources was carved out of the Department of Roads and Irrigation to referee water rights. That step, plus laws to identify the location of and better space out water wells, marked the dawn of serious state efforts to regulate groundwater.

A key step came in 1969, with legislation to reorganize 154 special-purpose districts into a more manageable and scientifically justifiable 24 (now 23) natural resources districts run by local boards. The districts were based on hydrologic boundaries, not political ones, with the power to develop water- and land-related projects.

Flood control stands as a central duty for NRDs, through construction of dams and reservoirs. An encouraging step is the growing coordination among the NRDs in developing management plans. "The efforts by the NRDs and DNR will have the entire state covered by basin plans in the next few years," says Dean Edson, executive director of the Nebraska Association of Resources Districts.

One challenge will be maintaining adequate funding for NRD operations, Edson says, since several funding sources have sunset provisions.

Important, too, is boosting water efficiency, he says. "Systems that were authorized in the early and mid-1900s were efficient uses at the time but may not be today."

With other states looking on, Nebraska can take pride in its water management system, even as it works to meet the challenges of the future.