Nebraska to Modify NRD Dry Year Plans?

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In July, an arbitrator concluded that Nebraska needs to change Natural Resource District ground water plans and cut back irrigation water use in dry-years to comply with the Republican River Basin Compact. This newsletter takes a look at the evolving Republican River dry-year plans.

So what are these dry-year plans? Basically, in the Republican Basin, Natural Resource Districts (NRDs) have cut ground water pumping and banned new irrigation wells. This is enough to keep Nebraska in compact compliance during wet-years and average years. But the plans don’t go far enough to keep Nebraska in compliance during dry-years.

So there would be new regulations that apply only in dry-years? Yes, when low water levels in Harlan County Reservoir trigger the dry-year provisions of the compact settlement, the new dry-year water use restrictions would go into effect.

How often do the dry-years occur? According to the United States Bureau of Reclamation, the water level in Harlan County Reservoir would have triggered a dry-year under current compact rules 19 out of the last 34 years, or 56 percent of the time. Way too often!

What did the arbitrator say about Nebraska’s overuse? Significantly, the arbitrator said the NRD ground water plans were inadequate to assure compliance during dry-years. Nebraska was out of compliance for 2005-2006, and the arbitrator warned that if Nebraska were out of compliance again, Kansas would seek penalties against Nebraska in addition to whatever Nebraska’s overuse cost Kansas in terms of crop losses. This would be closer to the $72 million that Kansas originally asked for instead of the $10,000 that Kansas ultimately received.

What are the dry-years options that the state and NRDs are considering? The first one (which was implemented in 2005-06), is called dry-year leasing.
Basically, surface water irrigators are paid not to use their water so it can be left, e.g., in Harlan County Reservoir. But in dry-years the reservoirs are also likely to be dry, so this isn’t anything that can be counted on.

**What else is being considered?** Republican NRDs are exploring moving water from the Blue River Basin into the Republican during dry periods. But this would cost millions of dollars, take years to implement, and funding is problematic.

**Are there other options on the table?** Kansas recommended permanently drying up 515,000 acres of irrigated land to achieve long-term compact compliance, including dry-year compliance. The arbitrator said this was too many acres: fewer acres could be dried up and still achieve compliance. The Nebraska Department of Natural Resources (DNR) is modeling how shut-down of “quick response wells” during dry-years would affect compact compliance. Quick response wells are those located within 2.5 miles of the river (see map below). This would be a last resort and would dry up, at least temporarily, between 250,000 and 340,000 acres, although the DNR is trying to see if the number of dried-up acres can be reduced.

**How much would that be?** There are about 1.2 million acres irrigated in the Republican Basin, so a 200,000 acre reduction would be about 17 percent of the total acres; 240,000 acres would be 20 percent; and 300,000 acres would be 25 percent. So it would be a significant reduction.

**Who would pay for this?** That is the big, unresolved issue. State law would need to be changed in order for the payment to come from NRD bonds. I would guess that the cost would ultimately be shared by the state and the Republican Basin NRDs, but this will be a major point of political debate in 2010.

**When will the final decision on the dry-year plans be made?** Probably in December, 2009.

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