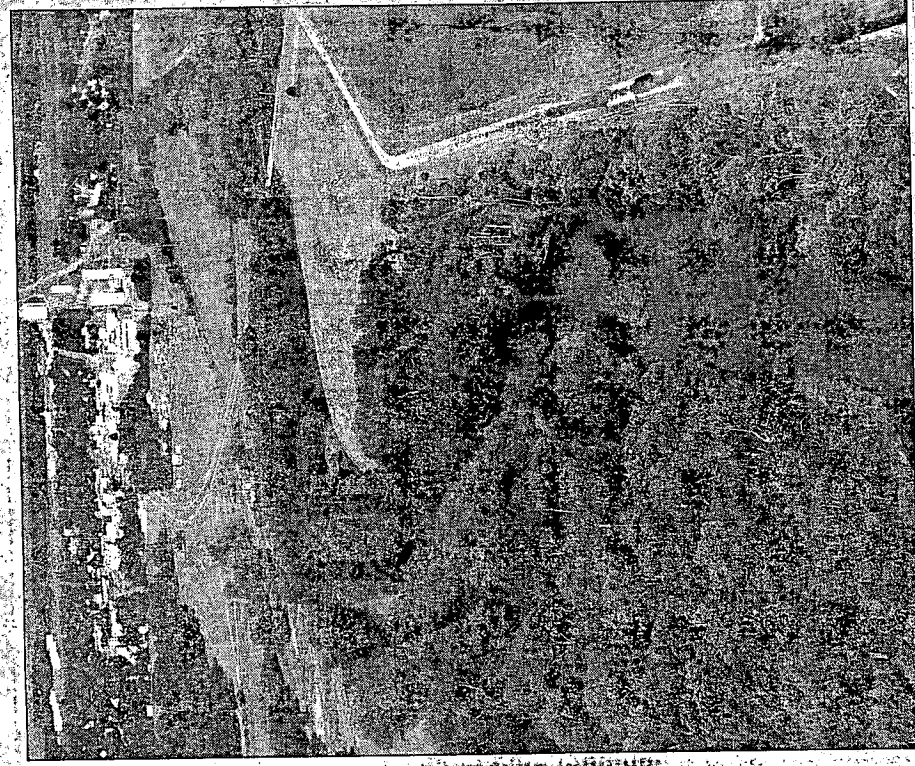


### River of Conflict

Nebraska and Kansas Battle Over the Republican River



WINDING RIVER: The Republican River, viewed from the air, winds through a tree-lined valley near Superior, Neb. The river and its vital waters cross into Kansas southeast of Superior.

## RIVER

# Many Interests Are Depending On Water Flows

Continued from Page 1  
Neb., in 1954 and raised seven children from the fruits of the Republican River Valley before retiring most of his land to his son. Irrigation water drawn from the river, say father and son, has allowed them to prosper in a part of the state where dryland crops fail every third year.

Downstream, Johnson, who manages a major utility in Kansas, Johnson County, relies on Republican River flows into the Kansas River to help quench the relentless thirst of Kansas City's booming Kansas suburbs. There, new houses, golf courses, office parks and strip malls spring from the prairie and strip up as Olathe.

The high court's first decision will be whether to take the case.  
The case, Kansas vs. Nebraska, But it just might be Nebraska farmers vs. Kansas farmers in Lawrence or Topeka, Kan. Or Kansas vs. Nebraska tax payers, who if Kansas wins the water fight could face a \$100 million bill.

While Kansas Attorney General Cath Stover and Nebraska Attorney General Don Stenberg both talk confidently about the case, water-law experts say the case is no slam dunk for either state.

The experts say the case probably would turn on interpretations of a 55-year-old agreement with language that is as murky as the river.  
"You're kind of throwing the dice out there," said Mike Jess, director of the Nebraska Department of Water Resources. "To me, it's kind of an even-money bet."

Should Nebraska lose that bet and Nebraska farmers be forced to cut back on irrigation, it would translate into millions of dollars in economic losses to producers, losses that would resonate throughout the basin.  
"If Kansas were able to win in a ruling on the Republican River," said David Aiken, a water-law specialist at the University of Nebraska-Lincoln, "the

drowned and more than 275,000 acres of farmland were badly damaged.

The devastation brought calls for construction of federal dams to prevent future flooding and, as a side benefit, to provide irrigation water. Irrigation was still recovering from the early 1930s dust bowl.

As a condition of building such projects, the federal government required states to negotiate agreements allocating river water that crossed state lines.

In 1943, Colorado, Kansas and Nebraska formalized an agreement dividing the Republican's water. The seven-page document took the total volume of water on the river and its tributaries each year and allowed each state to consume a certain percentage: Nebraska 49 percent, Kansas 40 percent, and Colorado 11 percent.

The agreement paved the way for the construction of nine reservoirs in the Republican Valley. Harlan County Reservoir, near Alma, Neb., was the biggest and provided millions of gallons of irrigation water annually to farmers in Nebraska and Kansas and created a new recreation industry in south-central Nebraska.

In the half-century since, irrigation from the Republican has brought economic stability to the region and helped turn the basin into one of the nation's most productive agricultural regions.

With bin-busting crops of winter wheat, sorghum, soybeans and corn, the basin counties produce about 12 percent, or \$2.6 billion, of the three states' approximately \$20 billion annual agricultural output.

"It was very difficult in dry years to raise anything," said Ron Milner of Imperial, Neb., whose parents moved to the basin to farm in 1929. "Irrigation has just made this area boom."

Irrigation took off in the 1960s and 1970s, with the advent of center-pivot irrigation systems. In Nebraska, farmers drilled wells by the hundreds in and around the Republican riverbed.

Nebraska has more than 1 million irrigated acres in the Republican Basin. Cutting back on consumptive water use in southwest Nebraska in particular would cost irrigators \$110 to \$135 an acre, said Ray Supalla, an agricultural economist at UNL.

pute between Kansas and Nebraska to a head.

"During 1991, the amount of water crossing into Kansas wasn't enough to meet that state's allocation. It was the first time that had ever happened.

Farmers in Kansas' Boswick irrigation district, which takes its water from Harlan, received less than their full allocation of irrigation water and saw the value of their crops drop by \$2.7 million in a single year.

Dozens of Kansas farmers who irrigated from wells near the river were told they would have to shut off their pumps.

### More Wells

In Nebraska, some farmers responded to the reduced water levels and dry conditions by drilling more wells.

"I remember vividly the early '90s when there was not enough water coming down the Republican River, and irrigators in Nebraska just pumped at will," said Janis Lee of Kensington, Kan., a farmer and member of the Kansas Legislature.

Heavy rains in 1993 and wet years since have refilled the reservoirs and eliminated most immediate concerns. But the rains haven't washed away what Kansas sees as the underlying problem: As drilling and pumping continue, particularly in dry years, Nebraska's overuse of water will only increase in frequency and magnitude.

"Our concern is what we saw before is going to be much worse the next time around," said Kenny Nelson of Courtland, Kan., superintendent of the Boswick district.

Kansas' interest in Republican flows, however, extends beyond the farmers living just across the border.

Byron Johnson, manager of the biggest water utility in Johnson County, Kan., watches the flows on the Kansas River. On a recent spring day, heavy rains had Kansas River water thundering over the water district's diversion gate. But in the dry days of summer, there's not always the ease.

"We've seen some very low flows on the river, and when that happens, we are vulnerable," Johnson said. "If the situation doesn't improve, we could see some real problems down the road."  
That concern over future water supplies is shared up-and-down Kansas.

World-Herald Photos by Jeffrey Z. Carney

consequences would be devastating for that valley and to our state.

Nebraskans outside the valley have real interests in the case, too.

For starters, there's the taxpayers' cost of the litigation, expected to run to more than \$10 million. The Kansas Legislature appropriated \$900,000 to press the case this year. The Nebraska Legislature appropriated \$680,000 for the case this year and next.

And if Nebraska should lose, Nebraskans could be liable for tens of millions of dollars in damages for past water overuse by Nebraska farmers. Taxpayers also could be asked to buy irrigated farmland that loses its water rights to compensate farmers for land that suddenly would be worth much less.

Colorado taxpayers face paying Kansas from \$30 million — Colorado's offer — to \$50 million, the amount sought by Kansas for Colorado's overconsumption on the Arkansas River. Potentially three times as much water is at stake in the Kansas-Nebraska conflict over the Republican River.

If the issue of whether Nebraska has used too much Republican River water were as simple as looking at the numbers, Nebraska wouldn't seem to have a great case.

The figures show that in the four decades since Nebraska, Kansas and Colorado formed a compact and began tracking water consumption, Nebraska has exceeded its annual allocation 17 times. Nebraska's excess consumption has averaged 6.5 billion gallons a year, enough to supply metropolitan Omaha's water needs for a little more than two months.

The Nebraska record is much worse on some tributaries, where figures show Nebraska has exceeded allocations by almost 12 billion gallons a year, on average.

But all those figures will be in dispute.

Nebraska will question their accuracy and argue that Kansas has almost always received its full allocation even when Nebraska took more than its share. Kansas will probably argue that the figures understate Nebraska's overuse.

At the heart of the dispute is the Republican River, a narrow, shallow, 430-mile waterway that begins humbly on the high, dry plains of eastern Colorado.

The river, fed primarily by fickle rainfall, slices across the extreme northwest corner of Kansas before crossing into southwest Nebraska. It then meanders through eight counties along Nebraska's southern border before dipping back into Kansas just east of Superior.

At Junction City, Kan., the Republican joins the Smoky Hill River to form the Kansas River, Kansas' most important waterway and one that serves more than 1 million people in some of the state's biggest cities: its capital, Topeka; the college towns of Lawrence and Manhattan; and the booming western suburbs of Kansas City such as Overland Park, Shawnee and Olathe.

The roots of the dispute between Kansas and Nebraska go back more than six decades to a time when, ironically, the river overflowed its banks.

On the night of May 30, 1935, more than 20 inches of rain fell in the Republican Valley, causing massive flooding. By the time the waters receded, 112 people were dead, 21,000 livestock had

Although its value varies with growing conditions, irrigation generally increases crop yields. Typically, it at least doubles the value of the land and taxes paid on it.

In southwest Nebraska, irrigated land under center pivots is valued at about \$1,160 an acre. Dryland acres with irrigation potential average \$543 an acre and dryland acres with no irrigation potential \$432.

For Eldon Moore, irrigation has helped make the difference between success and failure in a business where prices haven't changed a lot since he first got into the game 44 years ago.

Driving from field to field in his red diesel pickup recently, Moore looked out over the 11 center pivots arching over his land. The pivots are fed by 17 wells, some drilled as close as a quarter-mile to the river and others in the hills above the valley floor.

The resulting income has helped him buy lots of groceries, feed, fuel and machinery, cycling the benefits of irrigation throughout the community.

### Trickle-Down

"It's a trickle-down deal," said Bill Moore, who now rents most of his father's land. "It's not just the first guy, like Dad and I, that take water out of the ground."

But over the last decade, Kansas officials have complained that Nebraska's unregulated drilling and pumping in and around the Republican have reduced the river's volume and deprived Kansas of its allotted flows.

In the main stem of the Republican just upstream from Harlan County Reservoir, river flows over the last decade are 40 percent below what they averaged during the 1960s.

The drop generally is attributed to two factors: the drilling of irrigation wells in and around the riverbed, siphoning off water that would have been in the river; and terracing and other conservation measures by farmers that have limited the amount of runoff from rain and irrigation getting to the river.

Nebraska irrigators, over the last half-century have drilled more than 10,300 wells within the river basin, including an estimated 2,600 believed to take water directly from the riverbed. Drilling of new wells and replacement wells continues today, despite Kansas complaints.

"In all these years, development has occurred in Nebraska essentially unchecked," David Pope, Kansas' chief water officer, complained in a meeting of compact members last year.

But how much of the decreased flow into Kansas is due to irrigation pumping and how much to other causes isn't known. Three of the four locally elected natural resources district boards in Nebraska's part of the Republican Valley have refused to require farmers to install meters on wells to measure actual irrigation water use.

The three states making up the compact try to estimate Nebraska's consumption each year based on the number of wells, the amount of water needed to grow a crop and the amount of rainfall in the valley.

Those records indicate that Nebraska took more water than its total allocation most recently in 1989-91. That period — a time of extended drought that dropped the Republican to a trickle and had many in Kansas and Nebraska despairing for the basin's future — is what brought the dis-

plines is shared up and down Kansas power alley, the string of cities from Kansas City to Lawrence to Topeka to Manhattan that are the prime economic engine of the state.

Sprawling, affluent Johnson County is the Kansas City metropolitan area's primary growth area, nearly doubling in population over the last two decades to 435,000 and adding an additional 10,000 residents every year.

You can see that growth in the \$300,000-and-up homes rising in developments such as Cedar Creek in Olathe, where man-made waterfalls cascade down limestone walls and golf carts skitter around an 18-hole course. Last year alone more than 3,300 new homes were built in Johnson County.

As the county has grown, so has its consumption of Kansas River water drawn from the river at a concrete intake bunker near Overland Park.

The water district gets water from the Kansas and Missouri Rivers. It already is taking almost 10 billion gallons a year from the Kansas River and has plans for 15 billion more.

Johnson and other municipal water officials say they're concerned there won't be water to meet such needs if things don't change in Nebraska.

"There are indications the almost unlimited use of new wells in Nebraska has reduced the amount of flow coming across the line," said Larry Shannon, Topeka's water engineer and president of a water cooperative formed by the cities on the Kansas River.

Said Shannon: "We feel we need to protect our future."

### Losers, Winners

But it's not a simple case of Kansas municipalities trying to take water from Nebraska farmers. Shannon argues it's a matter of Kansas getting the water it is entitled to.

And some interests in each state would benefit if the other state prevails.

For example, Harlan County and its \$28 million-a-year recreation industry count on Republican River flows to keep reservoir levels high and stable for fishing and boating.

Those recreation interests could see those flows increase if the case forces farmers in southwest Nebraska to stop exceeding water allocations on the Republican tributaries that help feed Harlan. But the recreation industry also could be hurt if a court forced additional releases from the reservoir during summer months to meet Kansas' irrigation needs, something Kansas has previously sought in negotiations with Nebraska.

And some farmers in northwest Kansas are opposed to their state's lawsuit. That's because they are exceeding allocations on some Republican tributaries and, like their Nebraska neighbors, could ultimately see their water cut off.

It's clear that those with the most to lose are Nebraska irrigators.

Jerry Vap of McCook, past president of the National Association of Resources Districts, said he worries that irrigators in Nebraska, Kansas and Colorado all could lose in the end, with cities and industries in Kansas coming out on top.

"I really am concerned for the future," he said. "That's what we're talking about here, because this won't be settled for 10 to 15 years. Many people who are landowners out there now may never be affected. But their grandchildren could be."

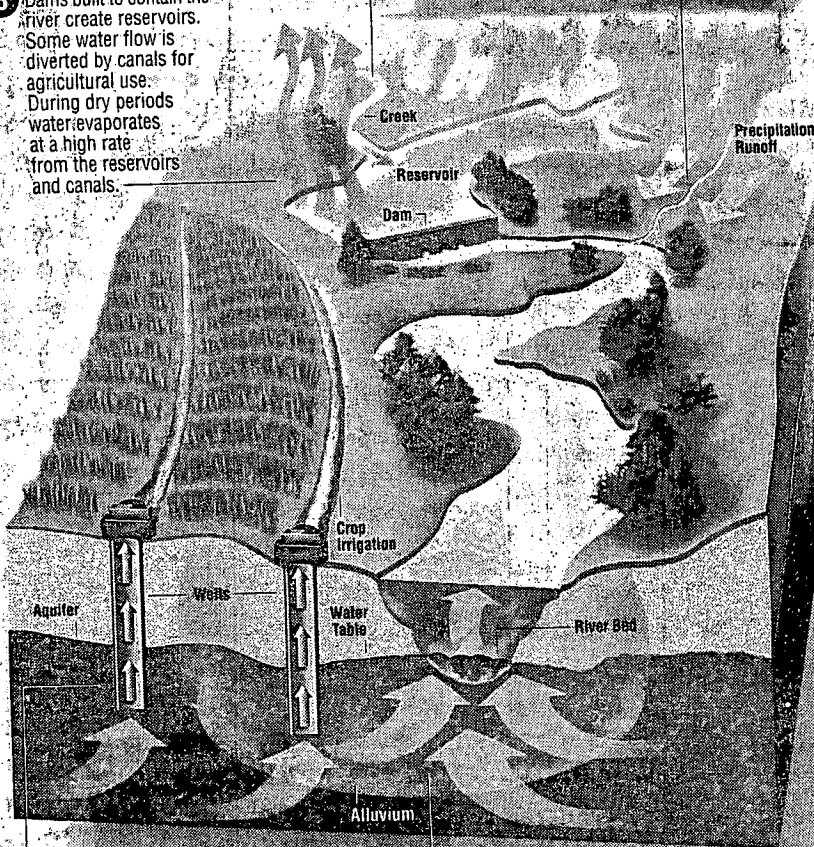
# Republican River Flow

The flow of the Republican River can be affected in many ways. Rainfall shortages and overuse can set off a chain of events compounding the problem.

1 Precipitation is the largest contributor to the Republican River. Precipitation absorbed into the ground also replenishes the Ogallala Aquifer.

2 The tributaries of the Republican River Basin carry precipitation and spring runoff to the river.

3 Dams built to contain the river create reservoirs. Some water flow is diverted by canals for agricultural use. During dry periods water evaporates at a high rate from the reservoirs and canals.

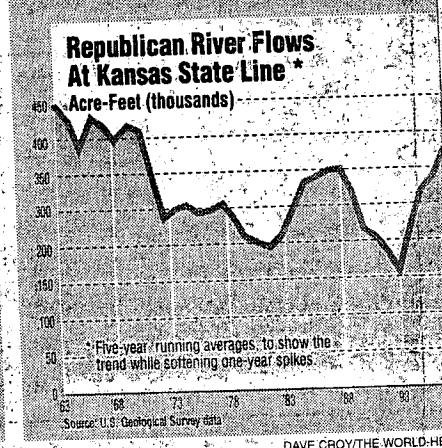
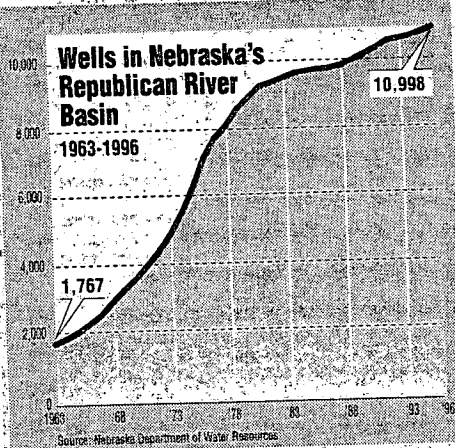


4 Irrigation wells tapped into aquifers can lower the water table when more water is being used than is being replenished, or pull water out of streams when they tap the alluvium.

5 Rivers can exchange water with the alluvium and other aquifers. When the water table is high, groundwater flows into rivers. If it's low, river water may replenish aquifers. The Republican is connected to the Ogallala in some places but not others.

Sources: Jim Goeke, hydrologist, University of Nebraska-Lincoln; U.S. Geological Survey.

DEAN WEINLAUB/THE WORLD-HERALD



DAVE CROY/THE WORLD-HERALD

### River of Conflict

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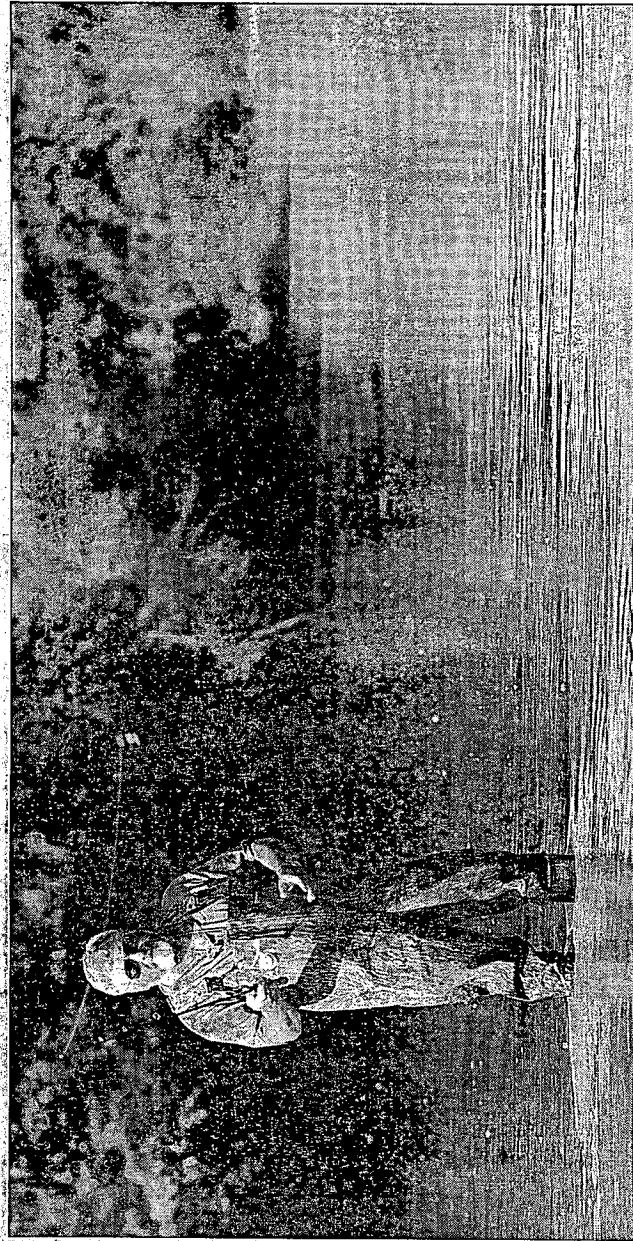
# Many Reasons To Use the River

The stakes are high in a new Kansas lawsuit that aims to curb Nebraska's use of Republican River water and the drilling of wells - potentially tens of millions of dollars. At risk are farmers in both states, residents of Kansas cities that use the Republican's water for municipal purposes, and the taxpayers who will foot the bills.



**ABOVE:** A diver from U.S. Underwater Services Inc. prepares to inspect and clean a water storage reservoir in Johnson County, Kan.

**RIGHT:** Gary Wheeler of Alma, Neb., fishes in the Republican River west of Hamilton County, Nebraska. The river and the reservoir are a multimillion-dollar recreation draw.



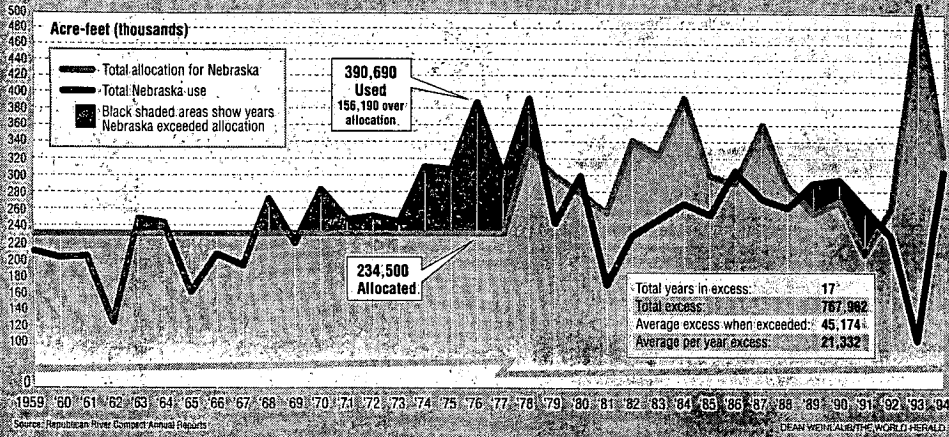
**BELOW:** Eldon Moore, a Bartley, Neb., farmer, taps wells like the one at right to consistently raise crops in the arid western end of the Republican River Valley.

**LEFT:** Jim Foster of Burdon Well Drilling in Bartley, Neb., welds part of an irrigation well on a farm near Trenton.



## Using More Than Our Share?

Nebraska has exceeded its Republican River water allocation 17 times since 1959.



# Water-Use Rules in Spotlight

BY JULIE ANDERSON  
WORLD-HERALD STAFF WRITER

McCook, Neb. — In many ways, what will be on trial in the lawsuit pitting Kansas against Nebraska over Republican River water will be Nebraska's water-use practices.

For decades, three of the four locally elected natural resources district boards in the Nebraska part of the Republican Basin have allowed irrigators to drill wells largely without restriction.

And for the most part, Nebraska irrigators have not been required to measure how much water they're using.

Kansas has expressed frustration with the drilling and with the glacial pace of Nebraska's efforts to regulate groundwater use.

Recently, some basin water users have said that tighter rules may be needed to strengthen Nebraska's position in the Kansas suit and to protect future water supplies.

Two of the basin NRDs that didn't already meter wells have moved toward doing so and the third is considering it. A group organized by Gov. Ben Nelson has been working on recommendations to help the NRDs manage groundwater.

Other water users oppose further regulation, expressing a concern that the state will use water metering to tax farmers' water.

Meanwhile, NRD managers say their districts have wielded authority effectively as the Nebraska Legislature has granted it.

"The NRDs and the irrigators will respond to a problem, but not to a political or perceived problem that revolves around a threatened lawsuit with a neighboring state which is not being harmed by their action," said Don Adams Jr., executive director of

Nebraskans First, a water-users group.

In many ways, Nebraska and Kansas provide a study in groundwater contrasts — a match-up of the haves vs. the have-nots and of local control of water vs. state control.

Nebraska, particularly in the western Republican Basin, is relatively flush with groundwater. In all but the Upper Republican NRD, groundwater has not significantly declined.

Water in Nebraska rivers and streams is regulated by the state, and those who want to use it have to obtain a dated, state water right.

But groundwater is largely regulated by the NRDs, often run by locally elected farmers. No water rights are required to drill a well, although wells must be registered with the state.

Kansas has limited amounts of groundwater in many places and has seen severe groundwater declines in the west. As a result, it has regulated groundwater use much more tightly.

"The whole of Kansas has learned we don't have an unlimited supply of water, and we have to learn to manage it," said Kenny Nelson, manager of an irrigation district in Courtland, Kan., that gets irrigation water from Harlan County Reservoir.

Authority over Kansas' groundwater lies with the state. Irrigators must obtain water rights that specify how much water can be used and how many acres can be watered.

Kansas also has long recognized the relationship between groundwater and flows in area streams and rivers, a concept known as conjunctive use.

"People in Kansas don't understand how Nebraska can argue that there's not a connection between

groundwater and surface water," said Mike Brzon, a Scandia, Kan., farmer and chairman of the Lower Republican Water Users. "Here, we live with it every day."

Kansas also has set minimum desirable stream flows on many of its waterways, including the Republican. When stream flows get below those levels, the state can shut off users whose water rights were granted more recently.

As the dispute with Kansas has heated up, Nebraska has increased groundwater management.

Through the creation of special regulatory areas, Nebraska NRDs have long had authority to regulate groundwater. The Upper Republican began using that authority to limit well-drilling and pumping in 1978.

In 1996 the Nebraska Legislature expanded NRDs' groundwater authority by legally recognizing for the first time the connection between groundwater and surface water in some locations. Under the law, the state can intervene in interstate disputes if NRDs are not using their authority as needed.

And the NRDs have joined studies being conducted by the University of Nebraska-Lincoln and the U.S. Geological Survey to determine whether wells are affecting river flows.

The Legislature also has given NRDs the options of metering wells and stopping new ones while the studies are under way.

The Legislature this year debated requiring meters and adopting a well-drilling moratorium in parts of the basin. The measure failed under heavy opposition from farmers. A compromise provided \$500,000 a year for each of the next three years to help pay for installing meters in

the alluvium, the bed of sand and gravel associated with the river.

The Middle Republican and Tri-Basin NRDs are poised to take advantage of that offer. The Lower Republican NRD is considering it.

The Upper Republican NRD last year established a districtwide moratorium on new wells.

State Sen. Chris Beutler of Lincoln said he thinks a basinwide moratorium on drilling in the alluvium may be needed.

Terry Woollett of Alma, Neb., a farmer and member of the Lower Republican NRD board, said that NRDs — even with irrigators serving on their boards — can make tough decisions on water use.

The problem, he said, is that groundwater levels are holding steady and that there is little information on the groundwater-surface water connection.

Tighter controls are starting to make more sense to some in the basin.

Ron Friche, a McCook farmer, said he opposed metering wells as recently as 11 months ago.

Friche, chairman of the Governor's Republican River Advisory Commission, now believes the basin needs to meter and keep better water-use records.

The commission has recommended developing criteria to limit drilling in some areas and to stop groundwater declines in others.

Such criteria would help NRD boards decide when new wells should be allowed and allow them to act without being considered bad, Friche said.

"If it helps the lawsuit, fine," he said. "But we've said we're trying to manage our water for future generations."

# Uncertainty Clouds Key Legal Questions

BY HENRY J. CORDES  
WORLD-HERALD BUREAU

Lincoln — As he prepares to represent Nebraska in a critical water dispute with Kansas, Attorney General Don Stenberg has boasted that Kansas can't win.

Don Pitts, the assistant attorney general handling Kansas' case for Attorney General Carla Stovall, gives few details about his strategy but leaves the impression he knows something; you don't.

Both men put on a confident face in a case in which millions of dollars and entire livelihoods are at stake. The confidence is based on the fact that each can make a strong case.

The outcome will depend on how the U.S. Supreme Court, if it takes the case, interprets a little-explored area of water law.

On the plus side for Kansas: Figures kept by the states indicate that Nebraska numerous times has exceeded its share of the water from the Republican River. Recent court rulings have favored Kansas.

In Nebraska's favor: Even if Nebraska has taken too much water, Kansas does not appear to have suffered much harm, potentially the most critical issue in Nebraska's defense.

"There's an awful lot of uncertainty here," said David Aiken, a water-law specialist at the University of Nebraska-Lincoln. "This is not simple stuff. There is a lot of new law to be made."

In recent interviews, Stenberg in Lincoln and Pitts in Topeka discussed some of the key legal questions that figure to play out in *Kansas vs. Nebraska*:

■ Is Nebraska taking more water from the river than it is allocated under the 1943 Republican River Compact?

The figures that Nebraska, Kansas and Colorado have kept over the last four decades would suggest that Nebraska has exceeded its annual allocation 17 times over the past 38 years.

However, Kansas and Nebraska will dispute the accuracy of the numbers.

Nebraska's alleged overuse would become more significant if a court were to enforce limits the compact places on individual river tributaries.

Stenberg plans to argue that the tributary figures are not important so long as Kansas receives its full allocation. Kansas will probably press hard to include the tributary figures.

■ Does the water Nebraska pumps from the ground in and around the riverbed count against its annual allocation from the Republican River?

Kansas' case is based on "conjunctive use," the interrelationship between stream flows and nearby groundwater.

In general, groundwater in the alluvium — the sand and gravel beyond a river's banks that make up the river's broader bed — and water in nearby rivers are considered to be connected.

It's a long-accepted concept in hydrology that is recognized in most states' water law, including Nebraska's.

Kansas' argument is that Nebraska's pumping of water in and around the alluvium has depleted stream flows into

Kansas. Compact figures have always included pumped groundwater in Nebraska's consumption.

Stenberg will argue, however, that since the compact does not mention groundwater or wells, only surface water taken directly from the river counts.

Kansas officials have called Stenberg's argument absurd. If the compact limits the amount of water Nebraska can take from the river, they say, it bars Nebraska from taking it indirectly by pumping connected groundwater.

Kansas has some precedent on its side. There are no references to groundwater in the compact between Colorado and Kansas on the Arkansas River. But the Supreme Court in 1995 ruled that Colorado's pumping of groundwater did count.

Also on Kansas' side: One of Nebraska's allegations in an ongoing suit with Wyoming over flows in the North Platte River is that Wyoming's groundwater pumping has depleted flows. That's an inconsistency that Kansas probably will be all too happy to point out.

In Nebraska's favor is the burden of proof. Even if the court accepts conjunctive use, Kansas will have to prove scientifically that such a relationship exists on the Republican River and show how much water is involved.

Kansas will have to overcome that hurdle using hydrological and geological tests, reams of data and complex computer models tracking the movement of groundwater along every mile of the river in Nebraska.

"It's definitely not a gimme for Kansas," Aiken said.

■ How has Kansas been harmed by Nebraska's alleged abuses?

Compact figures indicating that Nebraska has taken too much water also show that Kansas has received its full allocation in every year but one.

That's because in many years when Nebraska exceeded allocations, it consumed water allotted to but not used by Colorado. The compact is silent on how water not used by one state is divided between the other two.

Stenberg also argues that Kansas is not fully using its allotment, a fact that he argues makes damage claims even more spurious.

"Before you start closing down irrigation wells and driving down land values in Nebraska, the court will want to see where Kansas is being damaged," Stenberg said. "I don't see how Kansas can show they have been."

Pitts and other Kansas officials offer few specifics on how Kansas has been damaged but suggest such damages have been significant.

In the past, the Supreme Court has refused to referee interstate water conflicts unless the complaining state could show significant harm.

If Kansas cannot prove harm, Aiken said, the Supreme Court probably would refuse to hear the case at all. Conversely, if it can, he said, the odds in the case would appear to tilt significantly in Kansas' favor.