

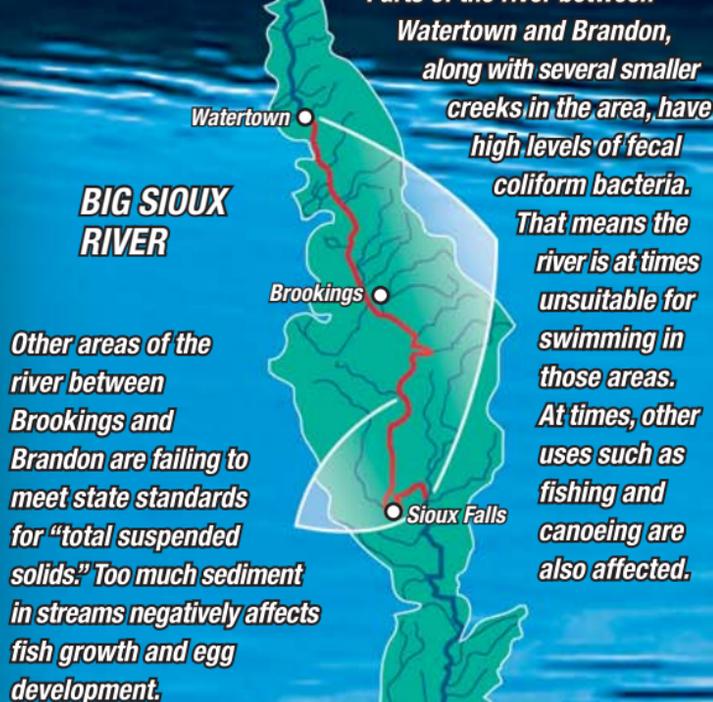
BIG NEWS on the BIG SIOUX

Your Guide to Water Quality Issues in Eastern South Dakota

WATER QUALITY IN THE BIG SIOUX RIVER AFFECTS EVERYONE.

The Big Sioux River flows peacefully from Roberts County in the northern tip of our state, all the way south to Sioux Falls and Brandon. There it continues on – defining the border between South Dakota and Iowa until it joins the Missouri River at Sioux City, Iowa.

Overall, the 395-mile Big Sioux River is clean and safe. That's the good news. Now the not-so-good news:



Parts of the river between Watertown and Brandon, along with several smaller creeks in the area, have high levels of fecal coliform bacteria.

That means the river is at times unsuitable for swimming in those areas. At times, other uses such as fishing and canoeing are also affected.

Other areas of the river between Brookings and Brandon are failing to meet state standards for "total suspended solids." Too much sediment in streams negatively affects fish growth and egg development.

WHAT HAPPENED?

It's hard to pinpoint specific causes, but scientists can make educated guesses. Natural conditions such as heavy rains and soil erosion play a part. Additionally, poor land management practices along the river in both rural and urban areas can contribute to water quality problems.

WHAT DO WE DO NOW?

The East Dakota Water Development District (EDWDD) in Brookings has received federal, state and local grant funds to fix the problems. Since it's your money we're using, we wanted you to know how we're addressing these problems:

▶ **Step One: Improve Animal Feeding Operations**

Overall, area farms and feedlots are doing an excellent job of monitoring their operations. However, there is always room for improvement. That's why over \$1 million in funds is now available to farmers living along the Big Sioux River between Watertown and Brandon.

The money can be used for improvements to animal feeding operations through new construction or engineering. These improvements can be as simple as installing filter strips or as complex as full containment systems.

This program is very important for the continued success of Big Sioux River water quality projects. Farmers and landowners are encouraged to call 605-688-6457 for more information.

▶ **Step Two: Get Back to Nature**

The best offense is a good defense, especially when you're dealing with Mother Nature. That's why, in addition to the feedlot upgrade grants, an additional \$1.4 million in funds have been allocated to get back to basics. In other words, help preserve or re-establish the diverse grasslands, woodlands and wetlands along the Big Sioux River.

These "riparian zones" are nature's shield for the river. The natural grasses filter dirt and debris, and help counter the effects of runoff from agricultural fields. They also provide food and shelter for many animals, as well as valuable flood control benefits.

To find out if you're eligible for this program, please call 605-688-6457 for more information.





Step Three: Focus on Communities

Water quality in the Big Sioux is not just a rural issue. Urban areas have a part to play as well.

For example, the city of Sioux Falls is currently addressing erosion and runoff issues through bank stabilization projects along the Big Sioux River and Skunk Creek. They're getting back to nature, too – with efforts to protect the river by extending conservation easements within the city limits. These easements will help re-establish the natural grasses and banks within the city limits.

Additionally, Sioux Falls is in the process of fixing storm sewer problems. This should further reduce erosion and runoff into the Big Sioux.

Similar efforts are being explored in other communities along the river.

Step Four: Work Together

You can be assured the Big Sioux River will continue to be monitored by water quality experts. Routine sampling and testing will help us keep an eye on what's happening in the river, good and bad. Here's what you can do:

- *Stay up-to-date on water quality issues where you live, work and play. Let community leaders know you care about the river. Because whatever happens to the Big Sioux in the northern part of the state, good or bad, flows south to affect everyone.*
- *If you farm in the area, use minimum till practices. Avoid plowing fields all the way to the edge of the water, and put up fences to keep cattle away from the banks and streams. Contact your local extension office for more ideas.*
- *If you have a stream, river or lake on your property, maintain the natural shoreline as much as possible. Grass all the way to the edge of the water may look nice, but natural vegetation and rocky edges are essential to stopping harmful pollutants and eroded soil. Local landscapers and extension offices are good resources for reintroducing natural vegetation.*
- *If you own livestock, it's important to keep your animals away from the natural grassy barriers between your farm and the river. A good rule of thumb is to set your fences at least 50 to 100 feet from the water's edge.*

Together, we can keep the Big Sioux River a beautiful, healthy place for generations to come.



BIG SIOUX RIVER



WATERSHED PROJECT

For more information please contact the
East Dakota Water Development District in Brookings
at 605-688-6741.

ABOUT US:

The East Dakota Water Development District promotes and supports the sound management and conservation of all water resources. As a political subdivision of the state of South Dakota, it includes all or parts of 11 counties in eastern South Dakota in the Big Sioux River basin.

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