## BOARD OF WATER AND SOIL RESOURCES

## **Crow Wing County leverages funds to cap unsealed wells**



The risk of groundwater contamination from improperly sealed abandoned wells is especially high in Crow Wing County, where most residents get their drinking water from groundwater sources.

The risk is especially great in the Pine River Watershed, where most of the groundwater is 10 feet deep or less. The direct connection between the surface and the water table can pose problems when abandoned wells aren't properly sealed. According to GIS data gathered by the DNR, surficial sands sandy soils on top of a high water table—are highly sensitive to pollution from nearby surface materials. This is especially problematic when these soils are present in areas regulated to prevent contamination of wells within a drinking water supply area.

Abandoned wells can contaminate groundwater by providing a pathway for surface-water runoff or improperly disposed of waste to reach uncontaminated water sources. Well sealing protects surface water quality where spring-fed streams or other groundwater connections exist. Abandoned, uncapped wells also can be a hazard for children and animals.

Crow Wing County has leveraged two Clean Water Fund grants from the Minnesota Board of Water and Soil Resources (BWSR) totaling \$52,000 to seal 186 unused and abandoned wells since 2012.

The grants cover 50 percent of well sealing costs, and the landowner is responsible for the remaining



Groundwater contamination risks are especially high in Crow Wing County, where most residents get their drinking water from groundwater sources. The risk is most elevated in the Pine River Watershed, where most of the groundwater is 10 feet deep or less. **Photo Credit:** Minnesota Department of Natural Resources

balance. Crow Wing County applies for grant funding, spreads the word about available funds, and works with landowners to explore options.

"Once people found out we would costshare half of it, that was the trigger," said BWSR Board Conservationist Chris Pence, who worked as a land services supervisor for Crow Wing County in 2013, when well sealing became a priority. "That's how the program really took off."

The maximum for individual grants is \$1,000. According to Pence, most well sealing projects average roughly \$500, but costs vary depending on the condition of the well.

"Sealing unused wells is one of the most important practices that can be done to protect groundwater resources in Crow Wing County," said Crow Wing County Environmental Services Supervisor Jake Frie.

County staff connected with local well drillers to identify potential projects in highly sensitive areas. Pence said no one knows exactly how many wells need sealing because no one regulatory body keeps an inventory. The goal for Crow Wing is to seal as many as possible to mitigate groundwater contamination.

The well-sealing initiative far exceeded a 2013 local water plan goal of sealing 20 wells in 10 years—186 wells have been sealed since 2012. In 2019, the county received a \$31,000 Clean Water Fund grant from the Minnesota Department of Health to continue their efforts to seal abandoned wells.