



Safeguarding drinking water: the Verdi Well Field Project

June 2016 Snapshots



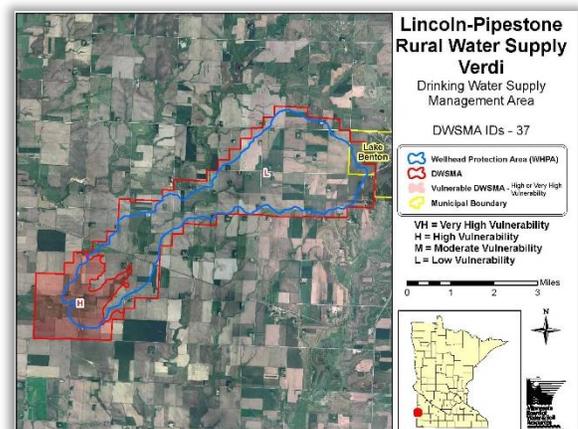
The Verdi Well Field is one of four well fields operated by Lincoln Pipestone Rural Water (LPRW) in Southwest Minnesota. It supplies drinking water to ten community water suppliers, serving about 4,509 people and 1,161 rural hookups. It is the main public water supply source for Lincoln County and functions as a backup water source in four neighboring counties. However, nitrate levels in the wells in 2011 indicated the presence of nitrate-nitrogen in all of the wells. According to Minnesota Department of Health (MDH) Planner Amanda Strommer, “LPRW and partner agencies are continuing to work together on projects to reduce the nitrate levels in the wells before they reach the maximum contaminant level and expensive treatment is required.”

The Verdi Wellhead Protection Area Project was proposed by Lincoln Soil and Water Conservation District (SWCD) and awarded Clean Water Funds from the Board of Water and Soil Resources in 2011. The project goal was to implement a buffer/filter strip program, an incentive program, and an educational program for landowners as a way to reduce nitrate levels in the Verdi Well field. As a result of project implementation, the SWCD was able to minimize loss of nitrogen from agricultural fields, decrease surface runoff, and filter out sediments, nutrients, and pesticides before reaching surface and groundwater pathways.

The initial survey of landowners and operators in the area was positive. 70% of those contacted expressed interest in participating in the program implementation. After five years, the program has been successful in taking that interest and transforming into meaningful action on the ground with farmers.

Since the 2011 award, the filter strip incentive program has enrolled over 50 acres in Conservation Reserve Program (CRP) filter strips along Spring Creek, which flows directly by the Verdi wells. The contacts made during the initial grant period have helped the program enroll another 20 acres of filter strip and an additional 90 plus acres of wellhead CRP in the area. Another 140 acres will be enrolled in wellhead CRP this fall. The Lincoln SWCD and the Farm Service Agency are the agencies responsible for the filter strip program and work with the CRP buffer/filter strip program along with the incentive program on a daily basis.

The success of this program has a lot to do with the outreach made to landowners and operators during the initial grant period according to LPRW Board Commissioner Randy Kraus.



*Pictured top: The Verdi Wellhead Protection Area.
Pictured bottom: Landowners and operators learn about the project at an outreach event.*

LPRW has helped financially with this grant on a percentage basis, and is also pursuing grant funding to purchase land to put into conservation cover in the Verdi well field area. They are focusing efforts in the Verdi well field to support the goal of reducing nitrates before treatment is required. Public water suppliers, counties, and MDH have partnered to hire a shared technician, housed in Pipestone County, to work on agricultural best management practices in the vulnerable wellhead protection areas in Southwest Minnesota. These partnerships are making a difference for drinking water in the region.