Verdi Wellhead Protection Area

Clean Water Funds: 2011

Clean Water Grant	$184,210
Leveraged Funds*	$47,500
Total Project Budget	$231,710

*** Leveraged Funds include required 25% local match**

Targeted Water:
Verdi Wellhead Protection Area

Project Sponsor:
Lincoln SWCD

Partners:
Lincoln-Pipestone Rural Water, MN
Rural Water Association, MN
Department of Health, MN
Department of Agriculture, MN
Department of Natural Resources

Grant Period:
January 2011 - December 2012

Project Contact:
Pauline VanOverbeke
(507)694-1630 x3
pauline.vanoverbeke@mn.nacdnet.net
www.lincolnswcd.net

Project Narrative

Project partners play a vital role in the implementation of the Verdi Wellhead Protection Plan and have made this water source a priority in lowering nitrate levels. The aquifer used by the wells in the Verdi Well Field consists of a sand and gravel horizon about 30' thick which overlies clay-rich till. The geological sensitivity in all five of the Verdi wells is classified as "high".

The Verdi Well Field supplies water to ten community water suppliers, 34 large rural users, and 1,126 rural hookups. Total population served by this water supply is about 7,500. It is the only water supply source Lincoln-Pipestone Rural Water has in Lincoln County and functions as a backup water source to both the Holland and Burr water sources.

Water quality monitoring indicates presence of nitrate nitrogen in the wells. The nitrate levels in the wells indicate that the wells pump groundwater that is under the influence of sources of nitrogen related to human activities.

Nutrients that are not effectively utilized by crops have potential to leach into groundwater or enter nearby surface waters via overland runoff or subsurface agricultural drainage systems. A major principle of crop nutrient management is to prevent the over-application of nutrients. These projects are designed to decrease surface runoff and filter sediment, nutrients, and pesticides before reaching surface and ground water. The goal of this project is to reduce nitrate levels in this water supply. This will be accomplished by providing landowners educational information and provide incentives to assist with the following: develop a nutrient management plan, utilize variable rate technology, utilize nitrogen stabilizers and nitrogen efficiency products and install filter strips.