



## Capital Improvement Project

# Imminent Health Threat Septic System Upgrade

**Failing wastewater drainfield**



The Vermillion River has been listed as impaired for bacteria since 2009. In 2017 the VRWJPO did DNA sampling along the river in the headwaters area to try to find the source of the bacteria impairment. Human DNA was found in two different locations in the river. We sent letters at the to landowners in the watershed with septic system upgrade information in 2017—2021. Cost assistance would only be offered to those with an imminent health threat and low income qualifying.

Estimated total reductions vary depending on whether the upgraded systems are classified as noncompliant or immanent health risks. The estimated range for two systems is 5 to 8 lbs./yr. total phosphorus using some assumptions as used by MPCA for draft Lake Total Maximum Daily Loads (TMDL) in the area and septic effluent concentration from the U of M Onsite Sewage Treatment Program Manual. Upgrades will also reduce the discharge and migration of other parameters, of which bacteria is of particular interest because of the impairment listing, but information is not available to reliably estimate a numerical outcome for bacteria.

Multiple efforts were made over the entire grant period to reach landowners for qualifying projects. While many letters and outreach attempts were made, this activity didn't result in any physical projects installed.

## Problem:

In 2017 the VRWJPO did DNA sampling along the river in the headwaters area to try to find the source of the bacteria impairment. Human DNA was found in two different locations in the river.

## Actions:

Properly abandon the failing septic system and install the septic system.

## Benefits:

Estimated total reductions vary depending on whether the up-graded systems are classified as noncompliant or imminent health risks. The estimated range for two systems is 5 to 8 lbs./yr. total phosphorus using some assumptions as used by MPCA for draft Lake Total Maximum Daily Loads (TMDL) in the area and septic effluent concentration from the U of M Onsite Sewage Treatment Program Manual.

## Costs & contributions:

- Clean Water Fund: \$8,000
- Local match: \$22,000 cash match
- Vermillion River Watershed Joint Powers Organization: grant fiscal agent
- Scott County: project administrative oversight

In 2017, human DNA was found in two locations along the Vermillion River

A project completed cooperatively by:



A grant from the Clean Water Fund, one of four funds established by the Clean Water, Land & Legacy Amendment, supported this project. [Clean Water Stories](#) can be found on the Minnesota Board of Water and Soil Resources website.