

ST. LOUIS COUNTY



The most common problems with failing septic systems are straight-pipe discharge, surface discharge into the yard, or backup wastewater surfacing or being piped directly into a ditch. St. Louis County is protecting groundwater, lakes, rivers and wetlands with two programs that address the issue. Assistance is available to low-income homeowners who qualify. To date, those St. Louis County programs have reduced by about 3.95 million gallons a year the amount of sewage discharged to adjacent wetlands, lakes, streams, rivers or groundwater. **Courtesy Photos**

Septic solutions aid environment; protect groundwater, lakes, rivers



VIRGINIA — By the time an inspector determined their septic system was an immediate public health threat and their only option would cost upwards of \$13,000, Justin and Amanda Lindberg had already weathered a streak of bad luck.

Laid off from his bricklaying job, Justin had followed the promise of work to his hometown of Aurora in St. Louis County. But that job fell through. The couple and their two children stayed with family at first, and then moved into a camper for a while. Eventually, they rented a place, and then bought a house on a contract for deed.

“We put all our money into fixing it up,” Lindberg, 34, said from the sidelines of a junior high football game, where he was watching his son play.

Two years after they moved in, the septic tank cover caved in. The St. Louis County Environmental Services Department inspector discovered a failing septic system. The tank was leaking. The system wasn’t draining properly.

The 1950s gravity-fed trench style subsurface sewage treatment system didn’t meet current standards. The lidless septic tank was full. Surface discharge occurred with heavy rains. The septic system met the state’s Imminent Threat to Public Health definition.



St. Louis County Environmental Services Director Mark St. Lawrence talks about the county’s efforts to repair, replace or connect to municipal systems those septs that meet the state’s imminent threat to public health definition.

Photo Credit: Ann Wessel, BWSR

It had to be replaced.

The Lindbergs are among 28 homeowners whose septic systems have been repaired, replaced or connected to a municipal sewer system since 2012 — using Clean Water Funds from the Minnesota Board of Water

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From the standpoint of environment and public health, obviously (the biggest benefit from the BWSR grant is) groundwater protection. ... For each year that we add four, five, seven more of these systems, it just improves the local environment and groundwater that St. Louis County promotes from the standpoint of tourism, recreation and quality of life.

— Mark St. Lawrence, St. Louis County Environmental Services Department director

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and Soil Resources plus the county’s local match. Three additional homeowners have been approved for system replacements in 2019, and one more house will be connected to a municipal sewer system.

As a result of two related programs, St. Louis County has reduced the amount of sewage discharged to adjacent wetlands, lakes, streams, rivers or groundwater by about 3.95 million gallons per year. That number increases with each failing system that is corrected.

Since 2012, nearly \$950,000 has been directed to the Imminent Threat to Public Health Abatement Program — accounting for about 3.65 million gallons per year of that reduction. Funding included \$479,616 from BWSR, \$381,000 from the St. Louis County Housing and Redevelopment Authority, and \$88,980 from the Minnesota Pollution Control Agency.

St. Louis County has a comparable program that provides funds to low-income homeowners to correct septic systems identified as noncompliant — further reducing the sewage discharged to adjacent water bodies or groundwater by 1 million gallons per year. Funding sources include \$400,000 from the county’s



Environmental Trust Fund and \$86,791 from the MPCA.

“Five years later, we might not have needed that. At the time, we did,” Lindberg said.

Today, the Lindbergs’ situation has improved. Justin is an independent contractor with a newspaper truck delivery route. Amanda works in home health care nursing. Their children are 14, 12 and 5. The youngest was born after they bought the house.

Before the inspection, the Lindbergs didn’t realize there was a problem.

“We always had it pumped every year, so we never had a problem. I guess you’re not supposed to have it pumped every year. The lid

had caved in and it was a hazard for the kids in the yard,” Lindberg said. “There was an 8-by-8 hole. I don’t know how deep that tank was — 8, 10 feet.”

Lindberg wasn’t sure what the family would have done without the program.

“We probably would have moved. I don’t know. We live out in the country, so there’s no city water or sewer. Probably an outhouse. But I don’t know how we would take a shower,” Lindberg said.

St. Louis County oversees more than 37,000 subsurface sewage treatment systems. As HRA funds taper off, Clean Water Fund grants and county Environmental Trust Fund dollars will become the primary funding sources of the Imminent Threat to

Public Health Abatement Program. The program strives to protect surface water, groundwater and public health within St. Louis County’s nine watersheds by ensuring subsurface sewage treatment systems comply with the law.

The program serves as a safety net, offering low-income, year-round homeowners the financial assistance they need to protect Minnesota waters and comply with the law. Assistance is awarded as a five-year deferred loan that converts to a grant after five years of home ownership.

“These are situations where people just don’t have any other avenue,” said Mark St. Lawrence, St. Louis County Environmental Services Department director.

The average septic replacement costs about \$18,000.

“Without this assistance, these homeowners cannot afford the septic system upgrades needed to avoid or resolve enforcement action aimed at protecting the environment,” St. Lawrence said.

Failing systems often come to light after a property has been purchased.

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— Cary Johnson, Arrowhead Economic Opportunity Agency Inc.

wastewater surfacing or being piped directly into a ditch.

As the housing inspector for Hibbing-based Arrowhead Economic Opportunity Agency Inc. for 30 years, Cary Johnson estimated he helped about 150 homeowners with septic system problems. He's still with the agency, but since March 2017 he's worked as the agency's warehouse manager.

In recent years, program changes and funding reductions to the home rehabilitation program prevented the agency from funding septic system repairs or replacements. The county programs have helped to fill the gap.

St. Louis County would refer homeowners to Johnson. Before Clean Water Funds became available, money came from community development block grants and the Minnesota Housing Finance Agency. But homeowners had to demonstrate the ability to pay back the loans.

“Some of them were in pretty rough shape,” Johnson said. “These are the poorest of folks that really need the help.”

Homeowners often were reluctant at first, but Johnson persisted. Many clients were on social security, and lacked the income to justify taking out a loan for repairs. Johnson took a compassionate approach.

“I know what it's like to eat a ketchup sandwich, so I don't forget those things,” Johnson said.

It was his job to inspect the properties, secure the bids and handle the final paperwork. He saw firsthand the public health and safety concerns.

“The wastewater is getting treated, where before it wasn't,” Johnson said. “Some were imminent threats right to our public waterways. ... I got to be a real advocate for clean water and our Earth.”

During initial property inspections, Johnson has seen septic systems discharging into waterways that flow into Lake Superior. One site in Duluth was particularly egregious.

“I remember walking through the tall grass to find where this discharge was. I sank up to my ankles — so I found it. Then I looked at this creek. The creek was full of green scum. There were definite imminent threats,” Johnson said.

At any one time, St. Louis County typically has 25 to 30 systems that pose imminent threats. Seasonal or rental units don't qualify for the program. Problems may go unnoticed until a homeowner seeks assistance from the AEOA, and routine questions reveal the issue.

“If it weren't for the BWSR money, more than half of these systems wouldn't have been upgraded, and I don't even know if we really would have had a program in place to use the local match that we had. Our program was developed because of the BWSR monies that were made available to us,” St. Lawrence said.

Program elements

St. Louis County's Subsurface Sewage Treatment System Program involves permitting, point-of-sale compliance inspections, escrow requirements, a record review process, compliance and enforcement, a septic loan program, community sewer system project assistance, a noncompliant system abatement program and the imminent threat to public health abatement program.



The Minnesota Board of Water and Soil Resources' mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. Website: www.bwsr.state.mn.us.