

Weatherization is a win-win for Miliona man, Minnesota

Steven Koelln Residence

Location: Spruce Hill Township, Douglas County, MN

Weatherization Improvements: High efficiency fuel oil furnace, attic air sealing and insulation, sealing and repair of duct work, rim joist spray foam, weather-stripping of doors and windows, a new whole house fan for ventilation, four storm windows, new cellar door, new carbon monoxide detectors and smoke alarms, and more.

Weatherization Assistance Provider: West Central MN Communities Action, Elbow Lake, Minn.

Steven Koelln of Spruce Hill Township in Douglas County was especially grateful in early December 2016, after his home was weatherized. His house received a complete energy overhaul—a new fuel oil



Weatherization recipient Steven Koelln (fourth from left) is surrounded by members of the West Central MN Communities Action Weatherization Assistance Program, including left to right, Carol Boyer, Missy Becker-Cook, Joe Niehaus, Mandy Braaten, Amy Lohse, Gene Wyttenback, and Toby Weigand (not pictured Diane Bender).

furnace, attic air sealing and insulation, repaired duct work, a new whole house fan, and much more—at no cost to Koelln.

“It was probably the best Christmas present I’ve ever received,” said Koelln, a former farmer who is disabled and lives just south of Miliona, 15 miles northeast of Alexandria. “It was a real godsend.”

Koelln qualified for and received weatherization help from the West Central MN Communities Action (WCMCA) agency based in Elbow Lake, Minn. A year after the work, he is realizing the great outcomes and is even more thankful.

“It’s made a huge difference in my home,” said Koelln. “On cold days before I had the work done, I would sit in my living room and watch the curtains move. There was a steady draft in the house, and the walls and floors were cold. But now I’m toasty warm in the winter, and the cool air stays inside much better in the summer. My fuel oil bill has been cut in half, and my monthly electric bills have decreased 25% to 40% each month. I am tremendously grateful.”

A lifeline for thousands of Minnesotans

For over 40 years, the state’s Weatherization Assistance Program has served as a lifeline to tens of thousands of Minnesotans who simply can’t afford to make significant home energy improvements. The program serves financially vulnerable residents like Koelln who struggle with high energy bills. It gives priority to the elderly, disabled, families with children, and those with the highest energy bills. Koelln, living in a farmhouse built in 1900, was a perfect candidate for WAP. He had been receiving energy assistance for five years and was on the WAP waiting list before getting help.

Koelln’s weatherization work included a thorough energy audit to determine the cost-effective measures needed for his home. WCMCA’s Gene Wyttenback performed the audit and diagnosed a number of energy shortcomings: high energy bills, lots of air leaks, poor insulation, an aging furnace, and inefficient appliances. He authorized a wide range of services, repairs, and replacements, including:

- Attic air sealing and dense pack cellulose insulation
- Air sealing throughout the house
- A new fuel oil furnace
- Sealing of duct work
- Spray foam insulation to the rim joists
- Weather-stripping doors and windows
- Four new storm windows
- A new cellar door
- A bathroom fan
- Re-venting the clothes dryer
- A new whole house fan for ventilation
- Replacing old incandescent bulbs with LEDs
- New carbon monoxide (CO) detectors and smoke alarms

In addition to the weatherization work, Koelln qualified through his electric utility—the Runestone Electric Association—to receive several new high-efficiency appliances, including a new electric water heater, refrigerator, and clothes washer. The appliances were provided as part of utility’s Conservation Improvement Program.

All the improvements and new equipment combined to make for a tighter, far more energy-efficient home, said Wyttenback. “We achieved a 25% reduction in air infiltration,” said Wyttenback. “Also, we replaced an aging 77% efficient fuel oil furnace with an 85% efficient new one, so that made a big difference.”

Koelln agreed. Before the new furnace and fixes, he was filling his fuel oil tank once a month. During the past winter, he filled it only once every two months.

Health, safety, comfort enhanced

In addition to energy savings, Koelln said the agency's whole-house weatherization approach has helped ensure the health and safety of his home, as well as improve indoor air quality. WAP services include testing heating systems and appliances for combustion safety, testing for CO and gas leaks, monitoring for possible moisture damage or mold infestation, and checking electrical wiring for safety.

Wytenback returned to Koelln's home for a monitoring visit to ensure that the work met WAP standards and is achieving energy-saving results.

A final component of weatherization was a visit from Amy Lohse and Diane Bender of West Central's "Proactive Program," which helped educate Koelln on how to conserve energy and manage his home's energy improvements. The program offers a wide range of energy-saving tips, including how to use a programmable thermostat. This service is provided to WAP recipients and prospective recipients.



WCMCA auditor Gene Wytenback pointed to the sealed duct work in the basement.

WAP serves Greater Minnesota

Mandy Braaten, Energy and Housing director for [West Central MN Communities Action](#), said her agency serves eight counties. "We weatherized 60 homes last year, and we'd love to serve many more, but funding is limited," she said. "We have a waiting list of 200-300 at any time during the year, so WAP is in high demand."

About 65% of the state's weatherization jobs were performed on rural Minnesota homes last year, she adds. Of the WAP households served by her agency, 56% had people with disabilities, 48% had seniors, and 48% had children.

In addition to the energy-saving and health and safety benefits of WAP, Braaten said WAP is good for the economy. Her agency employs more than five full-time equivalent workers devoted to WAP, and it contracts with 14 HVAC companies, five electrical companies, and six weatherization companies to do the work.

Job creator, economic booster

In addition to jobs, the economic benefits of weatherization provide a ripple effect. A University of Minnesota Extension study found that for every direct job funded by weatherization, an additional three-quarters of a job is created in the private sector in the state. The study also concluded that each

dollar spent on weatherization generates an additional \$1.09, on average, of economic activity in Minnesota.

“Weatherization is a win-win-win program,” said Braaten. “It saves energy, creates jobs, and is good for the environment.”

“My hat is off to the folks at West Central Communities Action,” said Koelln. “Their mission is to change people’s lives and improve communities. They have clearly made a huge impact on my life.”

What is the Weatherization Assistance Program?

The Weatherization Assistance Program (WAP) provides free home energy upgrades to income-eligible homeowners and renters to help save energy and make sure homes are healthy and safe. Authorized by the U.S. Department of Energy, Minnesota’s WAP serves households at or below 200% of the federal poverty income guidelines (\$50,200 for a family of four). Priority is given to households with elderly or disabled family members, children, or high energy consumption. In Minnesota, the program is administered by the Commerce Department in cooperation with a network of 24 local service providers.

Low-income people can apply for weatherization assistance through a [combined application](#) for WAP and the Energy Assistance Program (which helps homeowner and renters pay for heating bills). More information about WAP is available by visiting the [WAP section](#) of the Commerce website. Applicants need to determine the local service provider in their area, fill out an application, and send it to their service provider.