

No heating/cooling bills Geothermal well system can replace furnace, air conditioner

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CUMBERLAND — With the unpredictability of the crude oil market and worldwide issues like global warming dominating environmental news recently, Skyler Bolden believes people will continue experimenting with alternative sources to heat and cool their homes.

"You never know what the market will do next. Nobody wants to be at its mercy," Bolden said as he stood outside Wayne's Water 'N' Wells at the former site of Mason's Barn off Interstate 68 Friday afternoon. "This covers the base."
Bolden was referring to his company's geothermal well system, a heating and cooling system that replaces the need for a separate furnace and air conditioner. "It's rather undiscovered," he said, while watching workers install a system. "A lot of people really don't understand its capabilities, which is why people still use oil, coal or wood."



Wayne's Water 'N' Wells, headquartered in Oakland, is opening a new shop in Cumberland for its water and well drilling business. One of its services, geothermal wells, is being installed at the Cumberland site.

Geothermal wells work by drilling several hundred-foot holes into a lot, which are then plugged with tubes or geo loops. A heat exchanger inside the building pumps a nontoxic, antifreeze-like fluid through the loops to the ground, where the Earth's temperature stays a constant of around 50 to 55 degrees.

The fluid collects either heat or coolness from the earth or groundwater and transfers it back to the building, depending on whether it's heating or cooling the building.

Bolden said a homeowner can control temperature like a regular thermostat.

"It's very clean. It's efficient. It's renewable. No source of energy is being used except the groundwater itself."

Around 10 to 15 percent of Wayne's business is installing geothermal systems, although Bolden said that number is increasing consistently. Bolden said the systems can be installed in old and new homes. He said power plants and government and federal buildings are starting to install the geothermal systems, and Wayne's has even installed these systems "in the heart of Frostburg."

The increase in services is one of the reasons for the company's expansion in both Allegany and Garrett counties.

"We're increasing our company size ... so we can undertake demand, which we anticipate in the future."

Up to five different loops are available for the system, depending on the heating and cooling load, climate, soil conditions and landscaping. The new Wayne's Water 'N' Wells site used a vertical ground closed-loops method, with holes running 300 feet deep.

Although the initial cost to install a geothermal system is more expensive than installation of a traditional furnace or air conditioner, Bolden said the long-term cost savings are worth the investment. The system will reportedly equal the cost difference within four to five years.

"In the long run it pays for itself rather quickly," he said. "I think it intimidates a lot of people — the upfront costs and not being able to see the big picture of how it pays for itself."

Bolden's sister Jessica Bolden said the company hopes to have the new system operational by next week. She said Wayne's is celebrating its 25th anniversary. The Cumberland business could be open in a few months.

Bolden said interest in geo-thermal wells is growing as people continue to be turned off by the crude oil market. Although he doesn't predict it will eventually replace traditional heating and cooling systems

completely, he does see many converts.

"Once a lot of people figure out how great the system is, it's really going to take off just because the efficiency of it and the way it's self-contained," he added. "You can only deny it so long."

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