

# Parish uses ground water to stop sky-high energy bills

Green means two things at St. Vincent de Paul, Baltimore: air conditioning at virtually no cost, and heat in a way that spares the environment.

Three years ago, the historic downtown church was in the midst of a major renovation.

“The rectory was falling down around our ears and all the major systems were shot,” said Father Richard T. Lawrence, the church’s longtime pastor. Since the heating system needed replacing, an engineer suggested they look at a ground-coupled heat pump system.

“He said it would cost a ton of money to install but would save money in the long run,” Father Lawrence said. “I said, ‘Investigate that because we think in terms of the long run.’” That’s easy to do in a parish where the “new wing” was completed in 1888 and the church dates to 1840.

“It will be here for another 300 years,” Father Lawrence said.

He knew he wouldn’t recoup the installation costs for at least 10 years, but he has had a pleasant surprise: the system is so efficient that the air conditioning, which the church never had, is virtually free.

In fiscal year 2003, the old system cost \$11,303 for just heat. In fiscal year 2007, the church has paid \$12,044 but for that additional \$741 a year, they have air conditioning.

And the new system has a heat pump and a thermostat in every room.

“That’s a big help because the choir room is only used on Thursday nights; I can put the heat or AC where I need it,” Father Lawrence said.

The system consists of a series of wells, drilled under the church’s parking lot, that pull up heat energy from the earth – in this case it’s water, which is always 56

degrees in this latitude. Unlike a traditional heat pump, the system works against that water – not the outside air which can be 97 degrees on a hot day or 12 degrees on a cold one.

The only cost to the church is the electricity to run the well pump “but that can be a \$1,000 a month for a building this size,” Father Lawrence said. Still, he’s found it to be economical, giving him air conditioning and heat for what he was paying for just heat.

“I would recommend it to anybody who has a piece of ground to put the well and who’s going to be there for 15 to 20 years.”

Is he comfortable?

“I like to keep it a little chilly in winter and a little warm in the summer; I don’t believe in obliterating the seasons,” he said with a smile. “And in spring and fall I open up the windows and turn off the whole thing.”