

Saving Water and Caring for the Environment

Do you ever think about how much potable water, water that is fit for you to drink, is pumped into your home, how much you actually drink and how much your home environment *drinks*? Each year in the U.S. alone our buildings use 12.2% of all potable water. That's 15 trillion gallons each year!

As we designed the new monastery building, we looked at a smarter use of water both inside and out. We wanted to reduce our water usage through more efficient appliances, fixtures and fittings and water-wise landscaping.

- Irrigation (watering something artificially) is one of the main culprits of wasteful water practices. Potable water used for irrigation at Holy Wisdom Monastery is supplemented by four strategically placed rain barrels that store rainwater solely for its use in watering exterior landscape and indoor plants.
- Another element of the monastery's reduction of water is the selection of native prairie plants and trees for all the landscaping. These plants will require significantly less irrigation especially as they mature.
- Our choice of toilet fixtures is another critical component in reducing potable water usage in the new monastery building. Also, the dishwashing equipment for the new building was chosen partly for its water efficiency.
- Another element of reduced water usage is through the use of tankless instant water heaters. Potable water does not have to be heated and stored in a central location and then piped to the remote use locations thereby reducing the water piped.
- The new baptismal font was designed and constructed with a re-circulating and filtration system so as to safely reduce potable water usage.
- Some buildings can also reduce potable water use by recycling grey water. Grey water is waste water from showers or hand washing that can be properly treated and re-used in toilet fixtures. Because the new monastery building has a limited production of grey water (no showers), the re-use of grey water is not economically feasible.

The new monastery building will earn "Water Efficiency" credits toward LEED certification. The LEED process requires that computer modeling of water usage be performed during the design of the building. This projected water efficiency is then compared to a LEED base line standard. The modeling for the new monastery building projects that it will be 53.9% (that's 38,390 gallons) more efficient than the LEED base line.

*–Neal Smith, executive director, administration
July 2009*