

# Putting Water to Work—More Ways Than One

## Three Rivers Community Farm, Elsah, Illinois

Water Conservation and Grey Water Recycling at Three Rivers Community Farm

Coordinator: Amy Cloud

Location: Elsah, Illinois

SARE Grant: \$5,000

Grant Year: 2006

Project Number: FNC06-606

Amy Cloud and her husband, José Lara, obtained a SARE grant to design and build a system that collects and recycles water being used to wash their produce. The system consists of a sloped 4- by 16-foot concrete floor, which drains into an underground tank.

After three years of drought in Southern Illinois, water has become a precious commodity. That is why Amy Cloud and her husband, José Lara, obtained a SARE grant to design and build a system that collects and recycles the water being used to wash their produce.

"I feel a responsibility to being a steward of the city water, trying to get as many uses as possible from it," says Cloud, who founded Three Rivers Community Farm with Lara in December of 2006.

Cloud grew up on a 1,000-acre corn and soybean farm in Michigan, but she says she did not want to run a conventional farm, nor did she want to work behind a desk in the corporate world.

"So I just stumbled on this whole idea of organic farming and CSA's," she explains. "I always wanted to farm; I just needed to find the type of farming that fit."

Cloud and Lara lease 12 acres from Principia College, a small Christian Science school. Before they met, she had worked on organic farms in Massachusetts,



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Michigan, and northern Illinois since 2000. But after marrying, the time was ripe to operate their own farm, just a half hour north of St. Louis.

"I like being able to see all 12 acres of our farm, rather than driving around 1,000 acres to see everything," says Cloud. "Our whole farm is right there in front of us."

Cloud and Lara currently run a 150-member Community Supported Agriculture (CSA) operation and take their products to a farmer's market in St. Louis every Saturday. They sell 60 different vegetables, as well as meats on a small scale.

The property has no electricity, and their only source of water comes from a city water line. Ideally, they would like to build a well. But Elsah is located on bluffs overlooking the Mississippi River, so it is impractical to do so.

Currently, they wash their produce in Rubbermaid tubs, but most of the water goes back into the ground, creating large mud puddles and causing soil erosion. To deal with this problem, they received the grant in April of 2007 and set to work designing the new water-handling system.

With the new system, the water used to wash produce will flow to a sloped,

4- by 16-foot concrete floor, which drains into an underground tank. They are also planning to create a gutter system to collect roof runoff from their barn, funneling the water into a cistern located at one of the corners. Then a solar pump will convey water from both the cistern and the underground tank into a drip irrigation system.

The irrigation system will probably reach only a third of their acreage, Cloud says. They plan to irrigate the rest of their land from a 500-gallon water tank on the back of a truck—a tank filled with water from either the cistern or the underground tank.

Cloud projects that they will collect and reuse about 55,000 gallons the first year but will increase the total considerably down the road as their operation expands. City water recently spiked from \$5 per thousand gallons to \$6.50 per thousand gallons, so they use it sparingly.

2007 was very successful, Cloud says, and they plan to increase the CSA by about 50 members each year until they reach roughly 500 members, if all goes as planned.

"I like the concept of CSA's, being able to bypass the middle-man and determine what we consider to be a fair price for our product," says Cloud. "It's a win-win situation. People are getting the best produce around, and we get the opportunity to grow more interesting and tasteful varieties."

By Jason Peterson