

An aerial photograph of a river winding through a lush green landscape. The sun is shining brightly from the upper right, creating a large, brilliant reflection on the water's surface that dominates the center of the image. The surrounding land is covered in dense green vegetation, with some smaller water bodies visible. The overall scene is bright and clear, suggesting a sunny day.

The time
for sewers is

NOW

Public Water Supply District #13 of Jefferson County

Benefits of the Sewer System

We all will benefit from the new sewer system --

- **Improved safety and quality of lake and well water**
Even with a perfectly functioning septic system, phosphorous and nitrogen are added to the lake, and that promotes algae growth. Anything that goes down the drain ends up in the lake or our drinking water. Having septic systems all around the lake has led to high *E. coli* levels in several coves and the high nitrogen and phosphorous levels have contributed to the recent algal blooms. And even though your septic system may be fine, your neighbors' may not be. Even now there are failing septic systems around the lake.
- **Minimal maintenance of the system by homeowner**
The District will be totally responsible for the maintenance and all repairs to the holding tank, pump, lateral lines, mains, and the Waste Water Treatment Plant (WWTP).
- **No expensive replacement of septic system**
Every homeowner with an aging septic system is concerned about its lifetime. All septic tank and drainfield systems have to be replaced at some point in time. The central sewer system removes the worry and expense of replacing an existing septic system. Replacing a septic system can cost \$10,000 or more – and a loan at 5% requires a monthly payment of about \$106, that's much more than the projected monthly sewer user fee.
- **No expensive connection fee**
PWSD #13 is working very hard to eliminate all up-front charges. In a typical new sewer system the homeowner has to pay for the equipment and labor for installation of the Septic Tank Effluent Pumping (STEP) system, electrical circuit, lateral line, inspection fee, and connection fee. This usually costs the homeowner multiple thousands of dollars.
- **Increased property values**
Failing septic systems lower the property values of homeowners and their neighbors. When water quality in the lake deteriorates all property values will decrease.

The developer of Lake Tishomingo Subdivision envisioned a central sewer system for the community. Now, after sixty years we finally will have that system.

We have the **FUNDING**

On July 2, 2008 the Missouri Clean Water Commission placed the Public Water Supply District #13 grant application on the fundable list for fiscal year 2009. This means we will receive \$1.983 million in grant money from the Missouri Dept. of Natural Resources (MDNR). This, along with the \$2.243 million loan at a very low interest rate of 4.125% from the USDA-Rural Development, gives the District enough money to proceed with the construction of the central sewer system for Lake Tishomingo. The original 2006 cost estimate for the sewer project was \$4.3 million.

To guarantee that we receive all the funding promised, we have to begin construction of our sewer system in the next 9 months and make steady progress towards completing checklists provided by the MDNR and the USDA-RD. This means that if all goes according to plan, construction will begin this year, 2009.

If for any reason the sewer system is delayed for 9 months or more, we could lose the \$2 million in state grant money -- it will go to some other district. Then, due to the deteriorating quality of the lake water, the MDNR could mandate the installation of a central sewer system without providing any grant money. The **entire** cost would be borne by the property owners.

The District's Responsibilities

- For each home that connects to the system on schedule, it is expected that there will be no charge from the District for complete installation and connection of sewer lines and equipment.
- Maintenance of all pressure sewer lines and equipment including the repair and replacement of system components as needed, and pumping of the local STEP holding tank.
- User's guide to the sewer system that will detail the rules and regulations of responsible system usage.

The Homeowner's Responsibilities

Each residence will have a dedicated electric circuit and control box outside the dwelling near the holding tank. The electric circuit will be used to power the effluent pump. The District will install the electric circuit from the base of the electrical meter to the control box on a post in the ground. Or the homeowner can have the circuit installed or use an existing dedicated circuit that meets the specifications issued by the District -- this option requires a homeowner-signed electrical easement.

The homeowner must notify the District of any separate laundry outflow from the dwelling so that also can be connected to the system.

After the system is in operation each homeowner will be responsible for payment of monthly user fee, currently estimated at \$72 and for proper use of the sewer system including:

- maintenance of the gravity sewer line from the dwelling to the holding tank
- reasonable use of plumbing and no foreign material or chemicals poured into the sewer lines
- prompt notification to the District of problems

Connection Fees

For every home that is ready to be connected on schedule, the District intends to provide no-cost installation of

- outdoor electric circuit dedicated to the STEP system
- STEP system tank and pump
- connection to homeowner's sewage and laundry outflow
- labor and material for construction of lateral sewer lines.

Until the actual construction bids are received and accepted we cannot be 100% certain that there will be no connection fee. At this time we believe the connection will be free.

We have the PLAN

The sewer system will consist of two parts, collection system and the wastewater treatment plant (WWTP).

The collection is by Septic Tank Effluent Pumping (STEP) system. The system begins with a 1000-gal STEP tank installed at each residence. The outflow from the building will go into the STEP tank instead of the current septic tank. The STEP tank contains a holding tank for solids and a small effluent pump for removal of liquids. The sewage solids settle in the tank and the lighter liquid waste is pumped through lateral pipe lines to the main sewer line that will run along the lake roads. The solids that accumulate in the tank will be pumped out every few years just as is done with conventional septic tanks.

The WWTP will be built behind the dam as the original developer of Lake Tishomingo intended. It will consist of recirculating sand filters which discharge septic effluent over a bed of sand. The wastewater is filtered by the sand and treated by microbes that form there. Effluent is collected at the bottom of the sand filter and recirculated back to the top of the sand filter for repeat processing several times before final discharge through an ultraviolet disinfection unit. The disinfected water will enter the stream behind the dam and the spillway and end up in Belew Creek. 💧

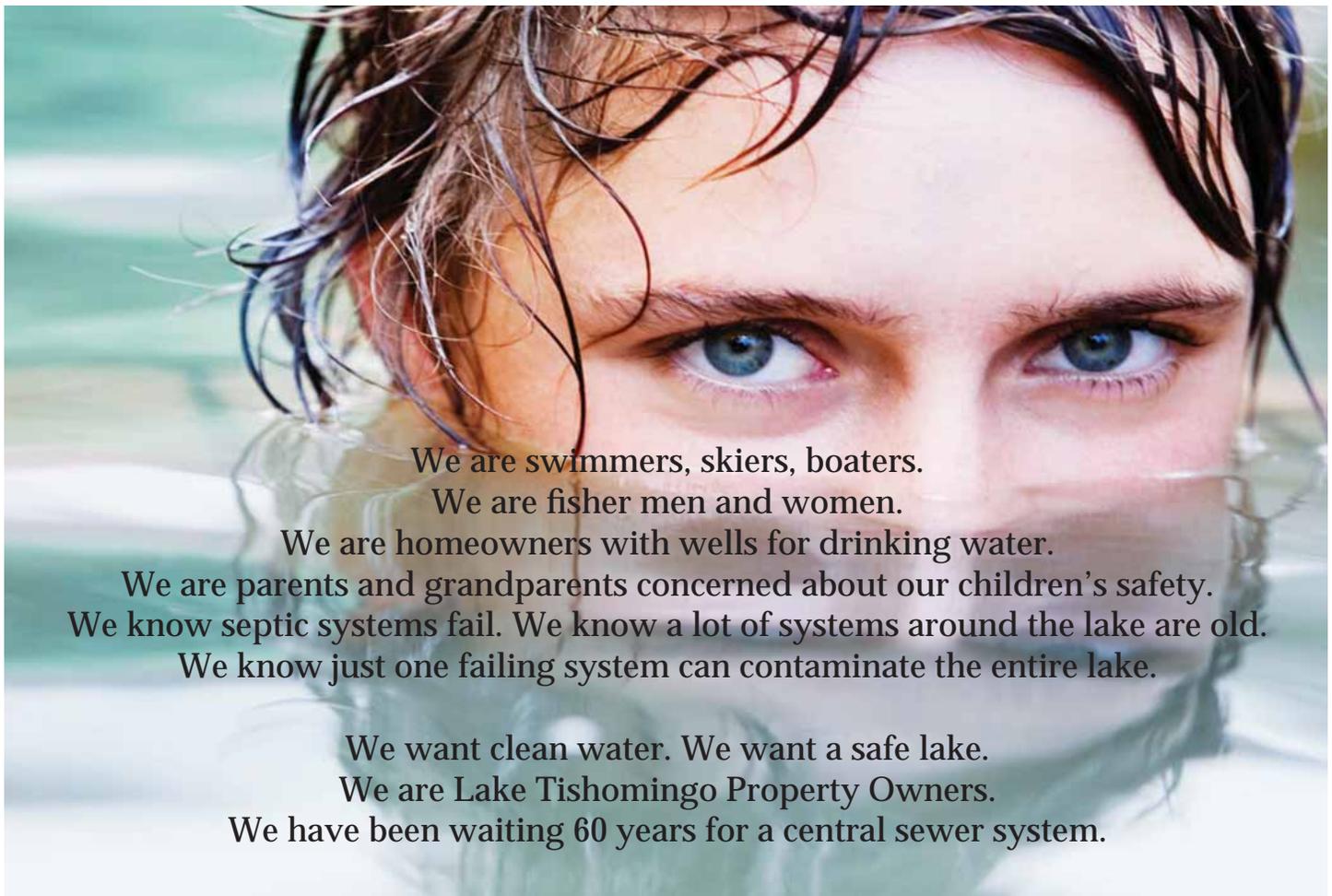
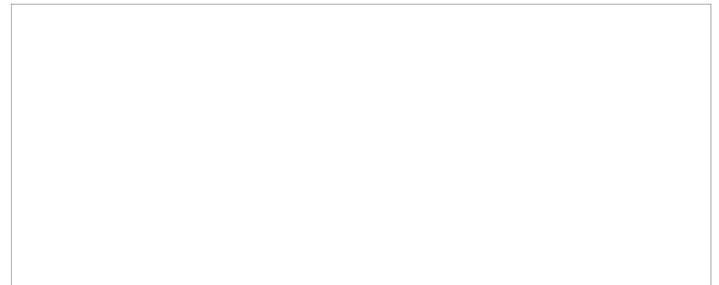


Cutaway view of a typical STEP tank installation.

Public Water Supply District #13 of Jefferson County
5699 Lake Tishomingo Road
Hillsboro MO 63050



We have the FUNDING.
We have the PLAN.
We are READY!



We are swimmers, skiers, boaters.

We are fisher men and women.

We are homeowners with wells for drinking water.

We are parents and grandparents concerned about our children's safety.

We know septic systems fail. We know a lot of systems around the lake are old.

We know just one failing system can contaminate the entire lake.

We want clean water. We want a safe lake.

We are Lake Tishomingo Property Owners.

We have been waiting 60 years for a central sewer system.