

NATURAL ENVIRONMENT

“Clean air, clean water, like freedom, isn’t free. It takes work and resources and commitment to keep what we have and to make it even better.”

Peter Herschend, Member, Upper White River Basin Foundation and Co-owner, Herschend Family Entertainment

Ask any resident what they love about Southwest Missouri and most will mention its natural beauty: streams and lakes, forests, rolling hills and limestone bluffs. Rapid population growth provides exceptional economic development opportunities, but also brings intense pressure to bear on these irreplaceable natural resources.

PROACTIVE EFFORTS. The community has proactively addressed ways to promote a clean and healthy environment:

- The Watershed Committee’s Watershed Center at Valley Water Mill will be a state-of-the-art education/demonstration facility. The group is raising about \$1.7 million to complete the \$7.5 million project.
- Through a partnership with the U.S. Environmental Protection Agency, City Utilities and the City of Springfield Solid Waste Management Division, methane gas from the City’s sanitary landfill is being converted to electricity. Three megawatts of power are produced and incorporated into CU’s grid, the equivalent of providing electricity for 1,200 homes for a year.
- Springfield is home to the first and only state certified electronics waste recycling facility with the Computer Recycling Center. National companies as well as local residents have contributed to the increase in the materials recycled at the CRC—from 205 tons in 2001 to 527 in 2006.
- Drury University has made a formal commitment to sustainability, joining only 25 colleges and universities on the Climate Commitment Leadership Circle.
- Greene County has completed a comprehensive management plan that balances the desire to protect the area’s natural environment with economic development, including agriculture.

EMERGING ISSUES.

Energy conservation efforts. Following the recommendations of the Power Supply Community Task Force, City Utilities received voter approval to build a new coal-fired power plant. One of

the results of the community discussion leading to the election was a strong interest in an aggressive energy conservation effort. Included in the power plant election was funding for conservation education and positive incentives from City Utilities. Some of these incentives have been put in place. Others are being planned. Energy conservation is seen as a critical step toward protecting our community’s air quality as well as lessening our dependence on oil.

Ethanol plants. At the time of publication, a large facility designed to produce ethanol is proposed to be built near Rogersville. Environmental concerns, including air quality, waste management and ground water depletion, are part of the community’s concerns about the plant’s location. Part of the discussion has brought more public awareness to the lack of groundwater protection laws in Missouri.

CAFOs. Springfield-Greene County shares the statewide concern regarding the locating of Confined Animal Feeding Operations (CAFOs) and the ability of local jurisdictions to regulate such large-scale agricultural operations. Environmental concerns include air quality, waste management, water quality and odor control. Counties lacking planning and zoning authority have turned to health regulations in an attempt to regulate/control both the locating and operating of CAFOs. Agriculture groups are divided as to their support of CAFOs, further bringing to light the plight of the small, independent “family” farm versus the larger corporate agricultural operations.

AN ICE STORM LIKE NO OTHER. The long-term effects and costs of the January 2007 ice storm will be felt for many years.

Damage to the urban forest in Springfield was significant, with thousands of trees lost. Residual tree loss will continue for two to three years as damaged trees, left standing in an effort to save them, fail to survive. The dollar cost of maintenance and replacement, negative impact on property values, plus the environmental costs—storm water management, air quality contributions, temperature moderation/energy savings, wildlife/bird habitat—are still being assessed at the time of publication.

Several groups are working together to educate the public in proper care for damaged trees and in reforestation, knowing this is an opportunity to ensure the diversity of our urban forest.



WATER QUALITY. Trend lines suggest that community stewardship has been effective in improving water quality.

- In August 2006, Greene County voters approved a quarter-cent sales tax for parks, a portion of which will fund water quality projects.
- In 2007, the City began a program to reduce storm and groundwater entering the sewer system through commercial and residential connections.
- For five years, the City of Springfield has led the way in storm water management, meeting stringent federal quality requirements.
- Phosphorus reduction has been exemplary. A \$24 million expansion to the Southwest Wastewater Treatment Plant, completed in 2005, will provide capacity into 2015. A \$22 million expansion of the Northwest Wastewater Treatment Plant, currently underway, will remove both phosphorus and nitrogen ahead of regulations.
- The City of Springfield Public Works Department has invested more than \$12 million to acquire more than 170 flood-prone and undeveloped properties since 1994.
- The Springfield-Greene County Health Department offers free water testing to private well owners.



STORM WATER MANAGEMENT FUNDING.

Springfield faces funding shortages to address increasing water quality requirements for storm water management issued by the national Clean Water Act. In addition, the city's estimated 600 miles of storm water infrastructure are aging; this, with rapid growth in the county, makes replacement inevitable. Although the quarter-cent parks sales tax passed in August 2006 will provide some short-term funding for targeted projects, a permanent funding source is needed.



SOLID WASTE MANAGEMENT FUNDING.

A stable funding source is needed to secure the sustainability of Springfield's Integrated Solid Waste Management System which depends on landfill tipping fees; no general or tax revenue goes to the ISWMS. Only about 300 tons of trash per day of the 850 tons Springfield citizens generate goes into the landfill, the balance going to out-of-town landfills owned by national solid waste corporations.

RELATED ISSUES.

Health and Environment. Community Partnership of the Ozarks Environmental Collaborative and Springfield-Greene County Environmental Advisory Board have completed a five-year planning project that assesses the environment as it relates to human health issues. Springfield was the first city in Missouri and one of the first 10 nationally to undertake this effort.

Stewardship Ozarks. In 2006, Community Foundation of the Ozarks launched Stewardship Ozarks Initiative, an effort to strengthen regional organizations committed to conservation efforts through an endowment building challenge and enhanced conservation grant making. Community Foundation

has committed \$100,000 per year to this effort. The challenge should result in more than \$1 million in conservation endowment and sustainability.

Green Building. Springfield-Greene County has embraced the "green building" concept, with Discovery Center being the first Leadership in Energy and Environmental Design (LEED)-certified green building in Springfield in 2007.

Habitat for Humanity, partnering with Greene County, now has under construction the area's first Low Impact Development, utilizing "soft" storm water management and including trails and landscaped common areas. Residents are coached in techniques for greening individual landscapes.

Springfield's first platinum-level LEED-certified commercial shopping center is under construction. Springfield Home Builders Association is promoting "green building" and using those practices in the construction of its new office.

Air Quality. Springfield is in compliance with the EPA's National Ambient Air Quality Standards. However, due to threshold changes in these standards, our population growth and climate, we are growing closer to unacceptable levels for ground level ozone and fine particulate.

The Springfield-Greene County Health Department is now forecasting air quality levels for these pollutants at: www.airnow.gov.

Solid Waste Management. Springfield-Greene County's Integrated Solid Waste Management System, approved by voters in 1991, includes curbside recycling; as well as centers for household chemical collection, yard waste and other recycling. Springfield is one of only three Missouri communities offering the full range of services for managing solid waste and the only one to include an award-winning market development program.

Private businesses have developed around waste reduction and recycling including Nestle Purina PetCare Company, which manufactures animal bedding/litter products from waste paper. The state's first and only certified electronics recycler, Computer Recycling Center, is located in Springfield.

Due to a statewide reallocation of funding for solid waste programs, Waste District "O," which includes Greene County, has seen an increase in grant funding from \$90,000 to \$250,000 per year.

Water Quantity. Maintaining the current supply of high quality, abundant and inexpensive drinking water has emerged as a future concern as the area continues to experience population growth. Approximately 70,000 people in Greene County depend on groundwater wells for their primary drinking water source.

In response, Greene County has undertaken a comprehensive groundwater study, to be completed in Fall 2008 at a cost of \$557,000. The last study was completed in 1986. This study is expected to shed light on groundwater levels and withdraw rates.