



Family and Consumer Sciences Extension

Housing and the Environment 2007: Water, Energy, and Waste Management

Learning for Life

The University of Georgia Cooperative Extension

The Problem

- Heating fuel prices have risen steadily, placing a heavy burden on many family budgets.¹
- Americans spend more than \$160 billion a year to heat, cool, light, and live in our homes, which is about 21% of the national demand for electricity and natural gas.²
- Deregulation of natural gas in Georgia has resulted in increased choices along with a confusing marketplace for many consumers.
- Nearly 40% of the solid waste Georgians throw away are materials that could be recycled. This becomes critical since many of the existing sanitary landfills in Georgia are nearing capacity.³
- Lack of knowledge about household hazardous waste, like batteries, fluorescent lights, and thermostats, which contain mercury can result in contamination.⁴
- Drought conditions in many regions of Georgia have resulted in stringent water use restrictions.⁵
- The average consumer uses 60 gallons of water a day inside their home. In some areas of Georgia, increased water demand threatens to surpass capacity of existing water treatment & distribution systems.
- Water quality and water use are often dependent on each other. When the supply of water is reduced, contaminants that find their way into the water become more concentrated and lower the water quality.⁶
- Water supply can be contaminated by faulty septic systems, urban runoff, small disposal pits, house and garden chemicals, stream infiltration, deicing salts, landfills, storage lagoons, underground storage tanks, fertilizers, pesticides, animal lots, etc.

Research-Based Solutions

- Households could save 20-30% on their energy bills by implementing energy efficiency improvements.²
- Water conservation technology can be used to delay or avoid capital expenditures for new water sources.
- Recycling, reusing and reducing can decrease the need for new solid waste landfills.

Extension's Role

- Create awareness of energy and water conservation, and waste management through media and local and statewide partnerships.
- Provide classes and educational information in natural gas deregulation, water and energy conservation, and waste reduction.
 - Participate in four-year partnership with Atlanta Gas Light and the Georgia Public Service Commission to provide education to natural gas customers on natural gas deregulation, bill literacy and energy conservation.
 - Educate Georgians on residential energy conservation as an *Energy Star*® partner with the Georgia Environmental Facilities Authority and the US Department of Energy.
 - Create new water conservation educational programming to respond to area droughts.

Extension's Contribution to Solving the Problem

- 131 extension programs on natural gas, water and energy conservation and waste reduction reached 3,401 Georgians in 2007.
- Radio and print media were used to reach thousands of Georgians with information related to natural gas deregulation, water, energy, and waste management.

Impact on Georgians

- 14 homes in Athens were made more energy efficient through the efforts of 20 Extension led volunteers who provided caulking, weather stripping and CFL light bulbs through a collaboration with HandsOnAthens.
- 94% of Georgians who attended a natural gas energy education session indicated that the program was very helpful with 90% reporting that they did not know at least one of the 10 key natural gas related concepts or facts presented in the session prior to the training.

Sources

1. Energy Information Administration. Accessed from <http://www.eia.doe.gov>
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4. U.S. Environmental Protection Agency. Accessed from <http://www.epa.gov>
5. University of Georgia College of Agricultural & Environmental Sciences – Georgia Drought. Accessed from <http://www.caes.uga.edu/topics/disasters/drought>.
6. U.S. Environmental Protection Agency – Source Water Protection. Available from <http://cfpub.epa.gov/safewater/sourcewater/>.

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