

GEORGIA'S WATER CONSERVATION EFFORTS: COOPERATIVE EXTENSION'S BANNER EFFORT

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Abstract Georgia has been gripped by drought for much of 2007 and 2008. UGA Cooperative Extension selected water conservation as a statewide priority in 2007 and developed educational materials for programming through county extension efforts. The project included components dealing with outdoor water use in conjunction with the Georgia DNR's WaterSmart program, with indoor water use in conjunction with the College of Family and Consumer Sciences, and a youth component in conjunction with the Georgia 4-H program. This presentation will include an overview of the materials developed as well as a discussion of some of the outputs and evaluations that have been conducted.

INTRODUCTION

Georgia launched a new statewide marketing plan for Cooperative Extension in 2005. An integral part of the plan called for unified programming efforts throughout the state. An advisory panel of Agents and Specialists was formed during 2006 that developed criteria for banner programs, the term we are using to identify this effort. The panel recommended that the first programs involve water and wellness initiatives.

Two task forces have been formed, the Extension water task force and the Extension wellness task force (see www.walkga.org). These groups worked during 2007 to develop curricula and attractive support materials and media packets for program implementation during 2008.

Research shows that people do not implement water conservation measures because 1) they lack the knowledge required to practice water conservation, 2) they are not aware of the importance/environmental benefit of individual efforts, or 3) they are unwilling to invest the time or resources to change consumptive behaviors. People need a tremendous amount of support to move to the action stage. With this in mind, the goals of the UGA water conservation program are to help people:

- understand the importance of their individual and household water use
- develop basic routine water saving habits

- gain support from others also interested in conserving by providing information and resources about household water conservation to homeowners and partner organizations.

WATER TASK FORCE

In February of 2007, a task force consisting of approximately 25 county extension agents, program specialists, and communication specialists was charged with implementation of the water banner program. The water conservation task force worked to develop a plan for training all of our county agents on water conservation. In addition, they developed a comprehensive set of training support tools to use at the local level and a county implementation guide to assist agents in incorporating conservation activities into their local work plans. Since each county has different needs, demographics, and community vision, the guide was set up to be adaptable to implement the program in a variety of ways based on the desire of the local agent. The implementation guide encouraged agents to establish a local work group to oversee these efforts and facilitate greater community involvement.

The main focus of the UGA Cooperative Extension Water Conservation Program is to provide Georgians with simple behaviors they can adopt to reduce the amount of water they use. The program includes Every Drop Counts, which is focused on indoor water conservation and WaterSmart, which is focused on outdoor water conservation. There is also a youth component. All personnel that work in county extension offices are familiar with both indoor and outdoor water conservation tips.

Every Drop Counts

The University of Georgia has implemented a water conservation campaign called Every Drop Counts. Through this effort, the University of Georgia encourages faculty, staff, students and citizens to conserve water as drought conditions throughout the state continue to threaten water supply. This campaign started on the Athens campus and was ongoing while the task force was developing its plan. Since the goals of this program were

similar to those of the banner program and were primarily focused on indoor water use, the water banner program adopted the Every Drop Counts campaign and expanded in from a campus effort to a Statewide. Reducing water use is everyone's responsibility. Periods of drought remind us that water is a limited resource. The average consumer uses about 60 gallons of water each day and loses 9 ½ gallons through leaks. In easy steps, consumers can reduce water consumption and save energy and money.

The key messages that were developed for indoor water conservation were:

- Wash laundry and dishes with full loads.
- Always turn off running water
- Take shorter showers
- Eliminate any and all leaks
- Reduce the flow of toilets and shower heads.

Since our Family and Consumer Science agents were more accustomed to working with homeowners on indoor issues, they led the developed of these training efforts and all of their agents were provided training on indoor water conservation.

Each District Extension office was provided six Every Drop Counts indoor water conservation teaching kits to help with implementing program activities. These kits included banners and posters, water Ekokits that contained items such as low flow showerheads, Teflon tape, aerators, flow meters, toilet tank bags, shower timers and control valves, publications, and several hundred Every Drop Counts refrigerator magnets. Each county was also supplied with a Cooperative Extension 'Conserve Water...Every Drop Counts' 3.5 gallon bucket with materials. In addition to serving as the container, the buckets were to be used to collect shower water as it warms to water indoor plants. The county level buckets contained 100 Every Drop Counts magnets with indoor water conservation tips, Every Drop Counts: Conserve Water at Home Extension publication, Household water audit publication, Toilet tank bank, Shower timer, and a Low flow showerhead. A 15 minute water conservation presentation was developed for local use that may be downloaded from:

<http://www.caes.uga.edu/unit/oc/marketing/ext/resources.html>.

waterSmart

waterSmartSM is a water conservation education program initiated by the Cobb County-Marietta Water Authority (CCMWA) in 2000. Its mission is to educate about the importance of indoor and outdoor water conservation and to help encourage sustainable, year-round conservation, regardless of climate conditions so that all residents can help make a difference and be waterSmart!

The Georgia Environmental Protection Division (EPD) began using the waterSmart brand in communications and

education activities in 2006 to help residents statewide understand how to maintain their landscapes while using less water. Their adoption of waterSmart was strictly focused on reducing outdoor water use. The water task force recommended that Cooperative Extension partner with the waterSmart effort for outdoor water conservation and a memorandum of agreement with EPD was signed in November 2007.

waterSmart was launched in 2007 in Albany, Augusta, Cobb County, Columbus, Dalton and Macon. Various extension agents in those counties participated in the pilot of the program. This was expanded to a Statewide effort in 2008. waterSmart seeks to conserve water in Georgia by encouraging reductions in outdoor water use. It offers simple seasonal tips and tools for maintaining healthy lawns and gardens while using less water. waterSmart tools for homeowners, teachers, and facilities managers can be found at www.ConserveWaterGeorgia.net.

The key messages of waterSmart are that Georgia needs green landscapes and that we can maintain healthy landscapes that save water, save time, save money with waterSmart's seasonal tips. These tips change over time and with the drought status but focus on:

- Water efficiently.
- Put the "right" plants in the "right" places.
- Add organic matter to the soil.
- Mulch.
- Harvest water from alternative sources and use it to irrigate plants.
- Know the rules.

Georgia's drought management plan calls for different levels of drought response under varying levels of drought conditions. Local governments may also have individual plans and drought responses that are more or less restrictive than the State. It is important for all agents to know the current drought status and county rules on outdoor irrigation since irrigation can be reduced or eliminated under certain scenarios. Even when irrigation is prohibited, there are many things we can recommend for water conservation.

For the waterSmart efforts, all agricultural and natural resource agents were provided training on the curriculum and tools for outdoor water conservation. This training included a presentation at the annual extension Winter school, a 1.5 hour training course on implementing water conservation programs, and online resources. A 30-minute presentation on landscape design and maintenance, including email or phone evaluation was developed and distributed to all of the agents. In addition, six waterSmart rainbarrel kits were distributed to each district office to loan out to agents. These kits included the rainbarrel as well as other conservation tools such as an Aqua Spike, tree Gator bag, a soil moisture meter, an automatic lawn

sprinkler timer, a Water-Miser 6-position garden hose nozzle and a how to make a rain barrel tip sheet. In addition, the buckets distributed to each county also contained outdoor conservation tools such as a waterSmart/UGA rain gauge, and 100 waterwise landscaping brochures.

Youth Component

Since youth education is critical to the long term sustainability of conservation implementation, a sub-committee was formed to develop strategies for reaching youth. The youth sub-committee held a staff development training with the Environmental Protection Division's waterSmart staff to preview the Drought in Georgia unit written for use with a sixth grade audience. These materials were written by sixth grade classroom teachers and have the support of the Georgia Department of Education. The Drought in Georgia lessons are correlated to the earth science standards of the Georgia Performance Standards. The lessons are engaging and useful and can easily be adapted for in school club meeting use.

Georgia 4-H will adopt the Drought in Georgia lessons as a curriculum track for use in sixth grade in school programming. During our first offering for the Drought in Georgia Staff Development session 24 Cooperative Extension faculty and staff were trained on the material. Each person attending the training received a Discovering Drought Activity Booklet and a Drought in GA poster/lesson plan for 6th grade. The curricula can be reviewed at:

www.ConserveWaterGeorgia.net/Documents/tools_teachers.html

RESULTS AND EVALUATION

As of November, 2008, county extension staff had submitted 3,382 reports of program activity related to the Water Conservation programs into the State reporting system. These activities resulted in more than 261,600 face to face contacts with clientele by more than 340 distinct personnel in 151 counties. Approximately, 1,740 hours of training activities were included with approximately 65% of this training targeted to adult populations and 35% targeted to youth. These activities also resulted in 26,000 hours of volunteer time being contributed and \$85,000 in in-kind contributions or support. It is important to remember that this reporting system only targets activities conduct by Extension personnel and would not include those of volunteers or teachers that had been trained through extension efforts.

These activities cover a wide range of delivery products and audiences such as presentations to community groups and local officials, rain water harvesting workshops for homeowners and landscapers, neighborhood rain barrel construction by local 4-H clubs, or working with

specific sectors such as agriculture and industry to develop site specific conservation plans.

For example, in Oconee County, Georgia, agents responded with a multi-pronged educational and media outreach program that targeted both water use reductions in the home and landscape as well as county wide policy that will assure prudent water use by all county water system users. About 775 youth and adults received face-to-face educational programming and methods of conserving water in the home and landscape. An estimated 15,000 attended the Oconee Fall Festival and observed the Extension/Utility Department water conservation booth. In addition, 42,800 Oconee citizens received media coverage co-authored by the County Extension Coordinator on water saving techniques. Resulting from the Oconee County Drought Contingency Committee recommendations, stricter enforcement and fines for outdoor water use are being implemented. Following Extension and other collaborators' educational effort, the Oconee Utility Department reported a 41 percent reduction in county water use for September and October, 2008.

Additional evaluation efforts are underway, although the results are not available. Questionnaires have been developed to be used with multiple audiences in both target and non-target counties to analyze the impacts of the education and extension efforts.



Figure 1. Members of the Georgia Water Banner Program Task Forces at an Extension In-service Training.

CONCLUSIONS

The extension water banner program task force is an excellent example of using our existing in-state network to deliver critical information in a timely manner. By working through Extension, the state rapidly mobilized an education effort that reached almost every county in Georgia. While evaluation data is still being collected and the programs are on-going, the success is evident in terms of the numbers of individuals reached and the impacts at the local level.