

GEORGIA

Solid Waste Trust Fund



Report for Fiscal Year 2010

Georgia Solid Waste Trust Fund

Report for Fiscal Year 2010: Executive Summary



The Solid Waste Trust Fund (SWTF) was established in 1990 as part of the Georgia Comprehensive Solid Waste Management Act. An amendment to the Act in 1992 established a primary source of funding for the SWTF in the form of a \$1 fee on every new tire sold in the state.

Each year, fees collected the previous year may be appropriated by the Legislature to the Georgia Environmental Protection Division (EPD), whose director is authorized by the Act to serve as trustee for the fund.

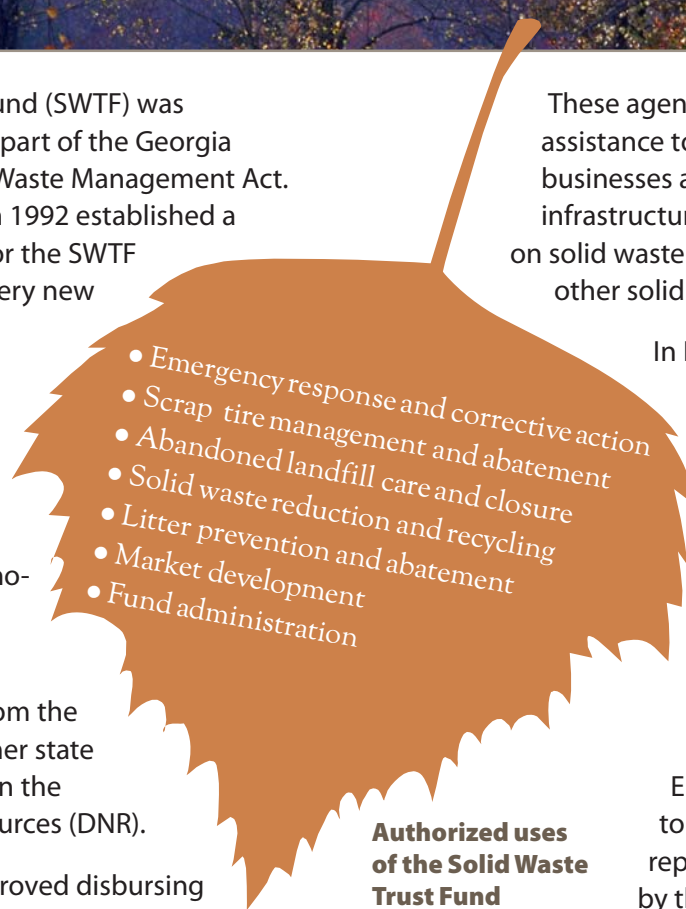
EPD also allocates money from the SWTF, when available, to other state agencies and divisions within the Department of Natural Resources (DNR).

In FY 10, the DNR Board approved disbursing money from the SWTF's reserve balance to the Department of Community Affairs, the Georgia Environmental Finance Authority, and the Georgia Department of Corrections.

These agencies provide technical assistance to local governments and businesses and fund recycling infrastructure and public education on solid waste reduction, recycling and other solid waste issues.

In FY 10, the DNR Board approved using \$3.5 million in SWTF reserve funds to clean up illegal scrap tire dumps, properly close abandoned landfills, and fund solid waste reduction and recycling programs and administrative/operational costs.

EPD is required by the Act to produce an annual report on activities funded by the SWTF; this report fulfills that requirement.



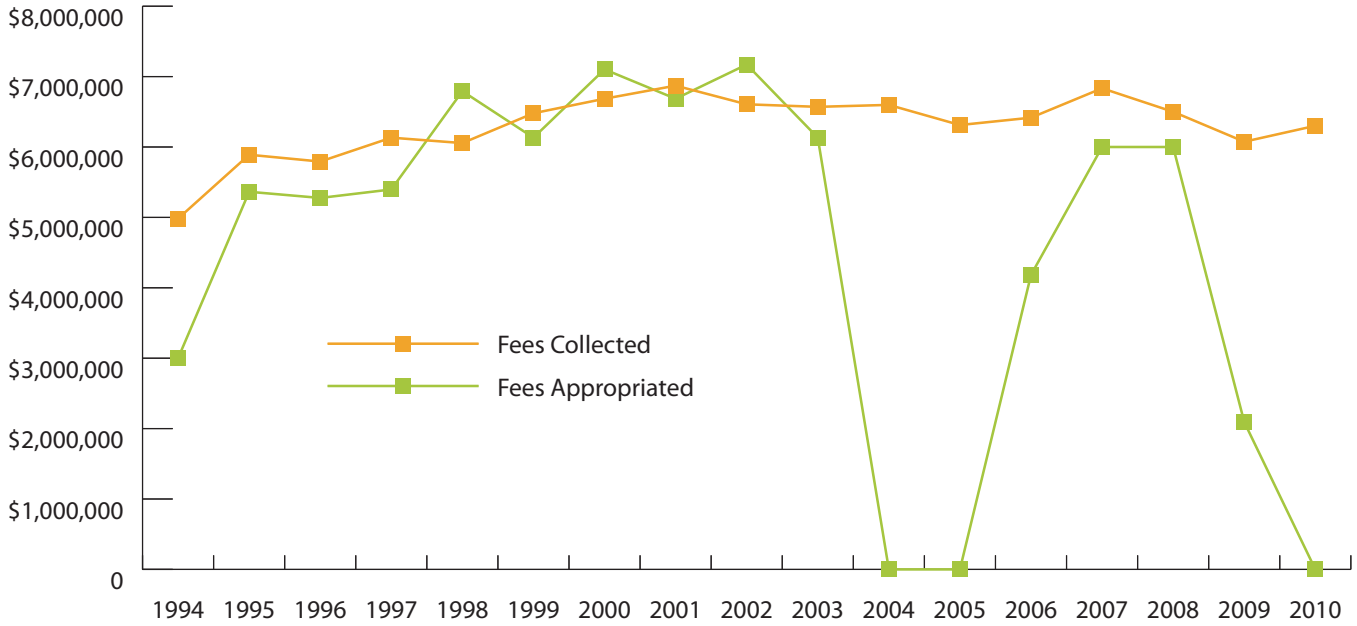
- Emergency response and corrective action
- Scrap tire management and abatement
- Abandoned landfill care and closure
- Solid waste reduction and recycling
- Litter prevention and abatement
- Market development
- Fund administration

Authorized uses of the Solid Waste Trust Fund

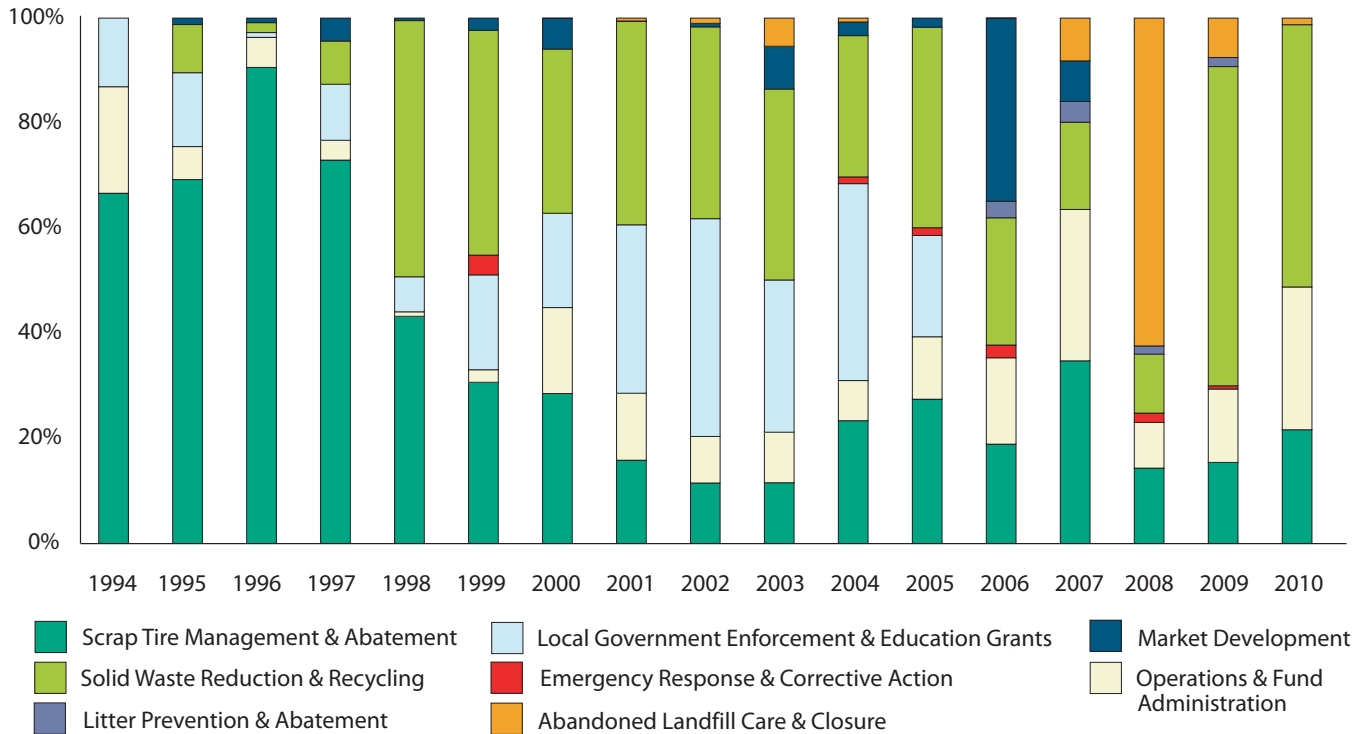
Georgia Solid Waste Trust Fund

Fee Collection, Appropriation & Expenditures — FY 94 - 10

Fees Collected on New Replacement Tires and Amount Appropriated to the SWTF - FY 94 to 10



SWTF Expenditures by Authorized Use - FY 94 to 10



Georgia Solid Waste Trust Fund

By the Numbers in FY 10



9,000,000

Estimated number of scrap tires generated in Georgia

1,000,000

Estimated number of scrap tires illegally dumped in Georgia

104,384

Estimated number of illegally dumped tires removed and recycled through local government efforts and/or state enforcement action

\$6,300,852

Amount of tire fees collected in FY 09 (and available for appropriation in FY 10)

\$1,437,614

Amount of Solid Waste Trust Fund reserves allocated for EPD scrap tire and solid waste operations and fund administration

\$804,985

Amount of Solid Waste Trust Fund reserves allocated to properly close a tire landfill in Upson County

\$399,596

Amount of Solid Waste Trust Fund reserves allocated to the Department of Community Affairs for solid waste planning, waste reduction and recycling

859

Tons of litter removed during Great American Cleanup activities across the state

3,494

Number of solid waste related technical assistance questions answered by state agency personnel

184,719

Number of Christmas trees recycled during "Bring One for the Chipper" events

243,230

Number of Web site pages viewed at EEinGeorgia.org, Georgia's online guide to environmental education

Scrap Tire Cleanup & Management

Environmental Protection Division



Along with posing a fire hazard, scrap tire dumps act as breeding grounds for snakes and disease-carrying rodents and mosquitoes. Mosquitoes, which carry the West Nile Virus and Eastern Equine Encephalitis, can breed up to 100 times faster in a water-filled scrap tire than in the natural environment.

Because of these dangers and also their impact on quality of life issues, eliminating scrap tire dumps is a priority of EPD's Scrap Tire Management Program (STMP).

Using a combination of permitting, outreach, compliance monitoring and enforcement, the program helps prevent new tire dumps and ensures that the majority of the 9 million scrap tires generated each year in Georgia are recycled.

Since the program began in 1992, more than 14.3 million scrap tires have been removed from illegal tire dumps and either recycled into new products or burned as an alternative source of fuel.

By the Numbers in FY 10



In FY 10, the program funded projects that resulted in the recycling of an estimated 104,384 tires. The program also reimburses local governments for cleaning up illegal tire dumps.

The STMP also keeps track of "orphan" tire dumps, sites where it is not known who dumped the tires. At the end of FY 10, there were 33 orphan dumps around the state, containing an estimated 163,422 tires that would cost \$345,944 to remove.

Other responsibilities of program staff members include registering new tire retailers and other businesses that generate scrap tires (including public and private fleet owners), issuing permits to scrap tire carriers (transporters) and processors

(recyclers), and collecting the tire fee.

Inspecting the tire retailers, generators, carriers, sorters and processors helps ensure that scrap tires are managed properly and do not end up in illegal dumps.

*Based on investigations of illegal scrap tire dumps around the state, EPD found that the tires often came from smaller retail shops or used tire dealers — a population that may not be as knowledgeable about Georgia's scrap tire management requirements as their larger counterparts. Consequently, EPD efforts in FY 10 focused on conducting compliance assistance visits to these tire dealers.

Solid Waste Reduction & Recycling

Environmental Protection Division



South Paulding County High School

Many times, the public's first contact with EPD is a file room employee. These EPD personnel play an important role in ensuring members of the public have easy, fast, and convenient access to the information they need.

For example, a developer may need to review site plans as part of a real estate transaction, a contractor working for a local government may need information for a landfill expansion, or a concerned citizen may be doing homework in preparation for a public hearing.

In FY 10, file room staff members responded to requests from 352 customers who viewed 2,335 files.

EPD's waste reduction staff also respond to customers' technical inquiries about waste reduction and recycling. In FY 10, members of this unit responded to 89 requests for technical assistance, including providing customers with recycling options for asphalt shingles, refrigerant, textbooks, auto shredder fluff, toilets, construction and demolition debris, tires, electronics, and biodegradable cups.

Other questions concerned compost and organics management (including yard trimmings), household hazardous waste management, litter, recycling rates, landfill tipping fees, waste hauling contracts, life cycle analysis, carbon credits, grease haulers, single-stream recycling, funding for alternative energy projects, and office waste reduction ideas and resources.

EPD began work on a long-range project to develop a comprehensive materials management strategy for Georgia. In FY 10, staff members conducted preliminary research on the state's major industrial waste streams.

Food Residuals Diversion

Waste reduction staff members also continued to focus on options to divert food residuals from landfills, part of a larger initiative funded by a \$45,000 federal grant. Activities included:

- Speaking at conferences on organics recovery and waste reduction
- Organizing national conference calls and an online forum to discuss composting with other states
- Maintaining a Web page to disseminate composting information
- Compiling and analyzing compost rules from across the country

Updating Georgia's Compost Rule

Another effort that began the previous fiscal year and continued into FY 10, was making updates to Georgia's compost rule. EPD hosted the final of three facilitated stakeholder meetings to review the existing compost rule and create a revised rule. Twenty-one stakeholders representing academia,

nonprofits, industry, state and local governments, trade groups and EPD staff attended.

EPD also led a conference call where more than 20 stakeholders involved in the rule-revision process were given the opportunity to ask questions of subject matter experts.

In partnership with the U.S. Composting Council (USCC), EPD launched an initiative to interview state regulatory personnel and compost operators from around the country about design and operational practices at compost facilities. The results will help accomplish two important goals:

1. Ensuring Georgia's proposed composting rule changes are science-based, while offering verification that similar rules adopted in other states have been effective, both in theory and in practice
2. Providing USCC the foundation and background data needed to develop a template of model rules, incorporating the recommendations, experience and ideas of solid waste professionals around the country

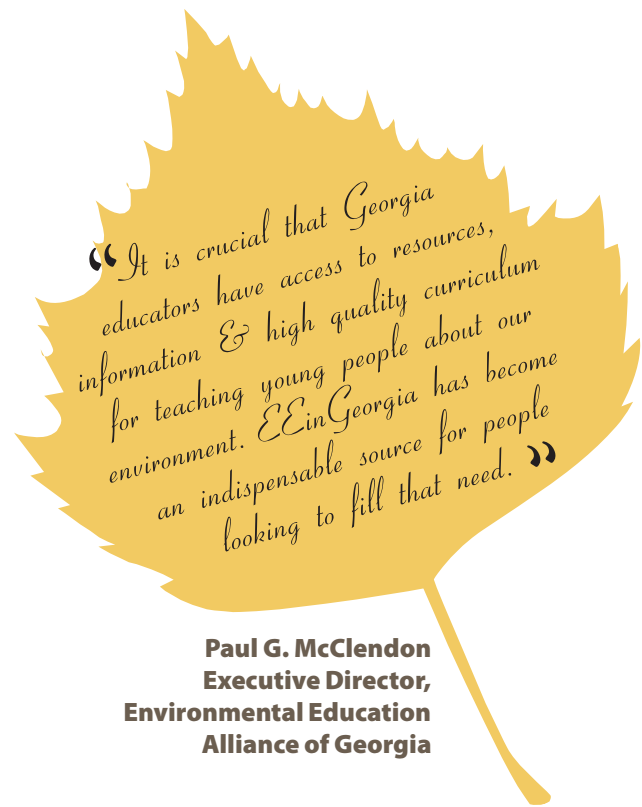
The finished template will offer both state regulators and compost operators the opportunity to see how a set of best practices, gathered from multiple states and diverse regions, might be combined to better promote composting and the development and maturing of composting markets.

Environmental Education in Georgia

The staff of EPD's "Environmental Education in Georgia" program support efforts to enhance public health and increase environmental stewardship by providing resources and direct assistance to K-12 teachers and nonformal educators (such as scout leaders and nature center staff members).

The program's main component, the EEinGeorgia.org Web site, fills a critical need by ensuring the public has easy access to environmental education resources — a vital part of improving environmental literacy in Georgia.

More than 390 state agencies, nonprofits, and other organizations submit resources, events, and information to this Web site, which acts as a central clearing-



house. Educators rely on the site to find environmental education lesson plans, curriculum guides, grants, awards, outreach programs, field studies, conferences, and professional learning courses.

EEinGeorgia's success in building statewide capacity for environmental education has inspired nine other states to use it as a model for their own sites. EPD is able to leverage its funds with resources from these partners to help offset program costs.

Why Environmental Education Is Needed. A study published in 2004 by the National Environmental Education and Training Foundation (NEETF) found that 68% of Americans lack a basic awareness of environmental topics. EPD and its partners recognize that developing awareness of environmental issues, as well as the knowledge and skills needed to make informed decisions and take responsible actions, is vital to attaining voluntary environmental compliance and stewardship.

Research by NEETF also revealed that as overall environmental knowledge increases, so does the likelihood of participating in activities such as saving energy and water, recycling, and reducing the use of chemicals in the yard.

Although there are many environmental education resources and programs in Georgia, educators are

frequently unaware of them or lack the means to easily compare them.

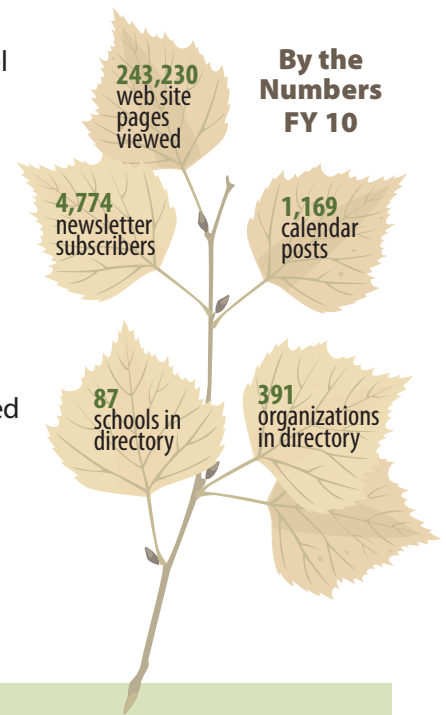
Also, many environmental education groups do not know what their sister organizations do, or sometimes, that they even exist. With no way to catalog or advertise their resources, organizations can risk duplicating efforts or even missing their intended audience.

Research by the National Environmental Education Advancement Project further highlighted this need by identifying an online clearinghouse or database of resources as a key structural component

in any comprehensive, state-level EE program.

EEinGeorgia.org has a proven track record — approaching 10 years — in successfully disseminating environmental education resources to teachers and others around the state.

In FY 10, visitors to the site viewed 243,230 pages, an average of 20,269 pages per month.



Seeking Grant Opportunities

Every year, James's high school environmental club participates in local river cleanups and stream quality monitoring programs. This year, the students want to do more by educating the community about litter and pollution prevention. They decide on a storm drain stenciling and public outreach program, but they need funds to buy materials. James's quick search on EEinGeorgia yields the ideal grant for the project.

Identifying Lesson Plans & Teaching Resources

John's 7th graders study ecology and impacts on natural systems. He wants to help his students master the state curriculum standards by making the topics relevant to them. John searches EEinGeorgia for educational materials on recycling appropriate for middle school students.

He finds the "Guide to Recycling in Georgia Schools" and uses it to involve his students, as well as the students' math teacher, in a project to measure how much waste can be recycled (and diverted from the landfill) by the end of the year.



How Teachers and Others Are Using EEinGeorgia.org

Learning from Others

Christine creates a profile on EEinGeorgia to showcase the various environmental education programs at her elementary school. Across town, Julie, a member of her school's Parent Teacher Association, agrees to chair the Green Committee. Julie learns that a composting program is a top priority. She searches EEinGeorgia to find nearby schools that have compost bins. Julie finds Christine's school profile and sees that not

only have they been composting for five years, but have also incorporated composting into the 5th grade curriculum. Julie makes an appointment to tour the school and learn about Christine's program firsthand.

Finding Professional Development Events

Erin posts a workshop her organization is hosting on farm-to-school programs on the EEinGeorgia calendar. Kim wants to learn more about using an outdoor classroom to supplement instruction in her 3rd grade science class and starting a school vegetable garden. She goes to EEinGeorgia and searches for gardening-related professional development events in her area. Kim finds Erin's workshop, sees that it fits her needs and registers.

Georgia Green & Healthy Schools

The Georgia Green & Healthy Schools (GGHS) program helps schools understand and practice environmentally sound principles. All public and private/independent schools (grades K-12) in Georgia are eligible to join.

GGHS broadens the scope of traditional environmental education by incorporating public health and environmental safety and integrating concepts from a variety of disciplines.

Where other environmental education programs focus solely on recycling and waste reduction, GGHS takes into account the complex nature of schools and works with teachers, school nurses, and facility managers, since all have an impact on environmental issues at their schools.

By the end of FY 10, 30 schools were enrolled in GGHS and four had advanced to the second of the program's three levels. Activities conducted by GGHS staff in FY 10 included:

- Presenting information on lead and asbestos compliance for private schools at the Pediatric Environmental Health and Safety Unit conference, attended by 450 private school administrators
- Providing GGHS teacher training and other support for Clark Atlanta University's Upward Bound program
- Presenting GGHS information at events around the state, reaching more than 3,500 people
- Providing assistance to 83 teachers at 10 schools in conducting GGHS audits and other activities

Also in FY 10, GGHS was used as a model for the Northwest Girl Scout Council's project, Greening Your School, which is now a national initiative sponsored by the organization.

After receiving assistance from EPD, Burgess-Peterson Elementary, a GGHS school in the Atlanta Public School System, was chosen to pilot a national WaterWise program.

Jessica Simmons
10th-grade English Teacher
Stephens High School, Toccoa
GGHS - Level 1

“This project is really going way beyond what I ever expected. The school and superintendent are very supportive and the students are enjoying the hands-on opportunity for learning writing, research and persuasion skills.”

Reaching Teachers with the Resources They Need

EPD's environmental education staff participate in conferences and workshops throughout the year to provide classroom teachers and nonformal educators the resources they need to teach Georgians of all ages about the environment and being good stewards.

In FY 10, staff members presented at nine conferences, including those of the Georgia Independent School Association, Georgia Science Teachers Association, Environmental Education Alliance of Georgia, and Georgia Parent Teacher Association.

Below, teachers attend EPD sessions at the Georgia Outdoor Classroom Symposium, sponsored by the Environmental Education Alliance of Georgia. In addition to the workshops they conducted, EPD associates also staffed an exhibit table.



Solid Waste Reduction & Recycling

Georgia Environmental Finance Authority



The Georgia Environmental Finance Authority (GEFA) is a state agency that administers a wide variety of programs that provide financial assistance and other support to improve Georgia's environment.

GEFA's program areas include water, wastewater, solid waste, recycling, land conservation, and energy efficiency for local governments, other state agencies and nonprofit organizations.

The Recycling and Waste Reduction (RWR) grant program, administered by GEFA with SWTF dollars, provides funding to local governments to construct recycling facilities and purchase equipment to reduce waste and recycle recovered materials.

While GEFA received no additional money from the SWTF in FY 10, several RWR projects funded in previous grant cycles continued to be implemented.

For example, prior to receiving grant funding, Forsyth County did not offer recycling in any of its public parks. Today, plastic bottles and aluminum cans are collected at two of the county's largest parks, Central Park and Sharon Springs Park.

The new containers in use throughout the parks clip onto the sides of the parks' trash bins, so patrons do

not have search for two separate containers. These bins have contributed to a "cleaner recycling stream," i.e. less trash mixed in with the recyclables.

Participation in the recycling program has grown steadily since the bins were introduced, and the two parks are currently diverting 3,220 pounds of materials per year from the landfill.

The county plans to continue monitoring the program and eventually introduce recycling in all of its parks.



Recycling bins and public education signage in Forsyth County parks, funded with grant money from GEFA.

Solid Waste Reduction & Recycling

Georgia Department of Community Affairs



The Department of Community Affairs (DCA) received \$399,596 in FY 10 to fund personnel who provide technical assistance to local governments and coordinate statewide recycling initiatives.

Recycling Education Campaign

To educate citizens and local officials on the benefits of recycling, DCA launched a statewide recycling education campaign using SWTF dollars in June 2009. Since it began, 169 Georgia communities have reported using the "YouGottaBeKidding" campaign to increase the recycling awareness of their residents; 21 communities and organizations have received incentive kits to help with their efforts.

In FY 10, 205 events related to the recycling education campaign were held in communities across the state, reaching an estimated 254,553 people.

Regional Recycling Hubs

Savannah, Griffin, Valdosta and Bulloch County were selected in FY 08 to receive grants to construct or expand facilities to form the basis of a statewide network of collection sites for recyclables. These hubs reduce transportation and operating costs, making it more viable for communities to offer recycling.

Grantees agreed to target new materials for collection, accept recyclables from a 50-mile radius, leverage private sector support, and report the amount of materials collected. Since becoming operational, the hubs have taken in 25,362 tons of recyclables.

Based on the success of these initial grant-funded projects, two additional hubs are being developed without the use of SWTF dollars. Macon Metal and Iron partnered with SP Recycling to accept materials in the Macon/Milledgeville area. SP Recycling also partnered with the city of Douglas and its waste haulers to build a hub.

Special Event Recycling

To offer recycling options for the public away from home, DCA began a special event recycling program in FY 07. Local governments applied for grants to receive recycling trailers, which are used by event organizers in their communities.

Since FY 08, 92.2 tons of recyclables have been collected at 1,036 events around the state (of which, 481 were able to offer recycling for the first time).

Technical Assistance & Reporting

In FY 10, DCA staff members responded to 3,405 requests for assistance, including questions about recycling, general waste management issues, and how to properly manage household hazardous waste.

DCA also helped local governments and private recycling facilities enter their solid waste data into an online database that is used to track and measure the effectiveness of voluntary recycling activities in the state. Workshops on recycling and solid waste planning for local governments reached an audience of 482 people.

Litter Prevention & Abatement

Georgia Department of Community Affairs



Keep Smyrna Beautiful

Under the Comprehensive Litter Prevention and Abatement Act of 2006, the Georgia Department of Community Affairs (DCA) is required to create an annual report on the status of litter prevention and abatement in Georgia.

In FY 10, DCA continued its support of the litter campaign through the use of the state's antilitter mascot, Buster the Brown Trasher; the Web site, LitterItCostsYou.org; and assistance to local Keep America Beautiful affiliate organizations.

Litter Enforcement Training

Two enforcement trainings were conducted in FY 10 in DeKalb and Liberty counties. Four hours of peace officer standards and training (POST) credit were earned by 80 law and code enforcement officers. Each attendee received a Litter Tool Kit to support efforts to reduce litter in their jurisdictions.

Great American Cleanup

Keep America Beautiful's annual Great American Cleanup is the nation's largest community improvement program. In FY 10, 64,652 volunteers worked 202,107 hours in 1,521 events hosted by 477 communities around the state.

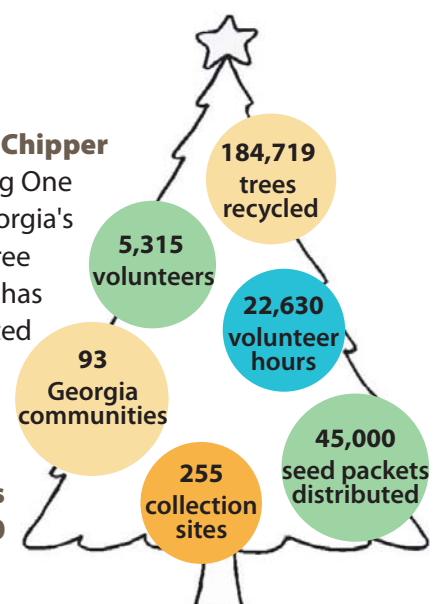
Volunteers collected 1,718,769 pounds of litter from 3,115 miles of roads and cleaned up 164 illegal dump sites. Communities held 1,296 environmental education workshops and events, drawing 284,972 people. Volunteers also collected for recycling:

- 2,554,602 pounds of metals
- 2,087,637 pounds of paper
- 675,324 pounds of glass
- 661,669 pounds of electronics
- 310,546 pounds of plastic
- 30,322 tires
- 3,928 batteries
- 182 cars

Bring One for the Chipper

Since it began, Bring One for the Chipper, Georgia's annual Christmas tree recycling program, has recycled an estimated 5 million trees.

By the Numbers in FY 10



Abandoned Landfills

Environmental Protection Division



Approximately 3.6 million tires were buried at the Kersey-Firetower Road tire landfill in Upson County by the time it closed in 1996. The site was abandoned by its owners before being properly closed, and hundreds of the tires are now exposed and present serious threats to both human health and the environment.

If the tires were to catch on fire, either because of a lightning strike or human intervention (people riding all-terrain vehicles have started such fires in the past), the site could burn for days or even weeks.

Problems from a fire would include thick black smoke that would aggravate breathing problems and possibly force evacuations, and polluted runoff that could make its way to the nearby Flint River.

Even if the site never happens to catch fire, the exposed tires create the perfect breeding ground for disease-carrying mosquitoes. As mentioned on page 5 of this report, mosquitoes, which carry the West Nile Virus and Eastern Equine Encephalitis, can breed up to 100 times faster in a water-filled scrap tire than in the natural environment.

At more than \$8 million, the estimated cost to excavate, clean, transport and recycle the tires (the preferred solution) was not economically feasible. Instead, a contractor will rebury the tires and complete the proper landfill closure process for a cost of \$1.7 million.

In FY 10, EPD continued to move forward with its plan to mitigate the site, using \$50,602 from the SWTF. A request for a professional services proposal was issued in July 2009 and a construction quality assurance contractor was selected.

EPD also secured a right-of-entry agreement from the new owner of the site and issued an "invitation to bid" to choose a contractor to perform the physical closure operations.

This fiscal year marked the end of work on another landfill. The Scales Road Landfill in DeKalb County began accepting waste in 1990 and, by the time it closed in 2004, covered nearly 25 acres and contained approximately two million tons of waste.

The landfill's owner declared bankruptcy and abandoned the site. Because the landfill was not properly closed, environmental conditions deteriorated; erosion exposed waste and fires were reported. EPD used SWTF money to hire a contractor to properly close the site.

In May 2010, EPD performed the final inspection of the landfill for the post-closure maintenance period and determined that the layer of vegetation covering the landfill had been satisfactorily maintained for the required 12-month period. The last invoice from the contractor in the amount of \$43,210 was paid and the contract closed, bringing the final cost of the project to \$4.9 million.



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