GEORGIA SOLID WASTE TRUST FUND

REPORT FOR FISCAL YEAR 2011



ENVIRONMENTAL PROTECTION DIVISION Georgia Department of Natural Resources January 2012

BRIEF HISTORY OF THE TRUST FUND

The Solid Waste Trust Fund 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 fund in the form of a \$1.00 fee on every new tire sold in the state.

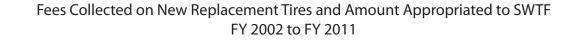
During its 2011 session, the Georgia General Assembly passed House Bill 274, extending collection of the fee through FY 2014.

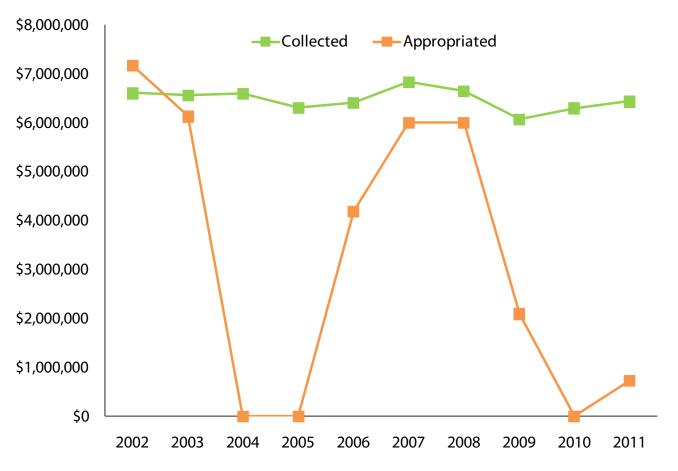
Each year, fees collected the previous year may be appropriated by the General Assembly to the Environmental Protection Division (EPD), whose director is authorized by the Act to serve as the fund's trustee.

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

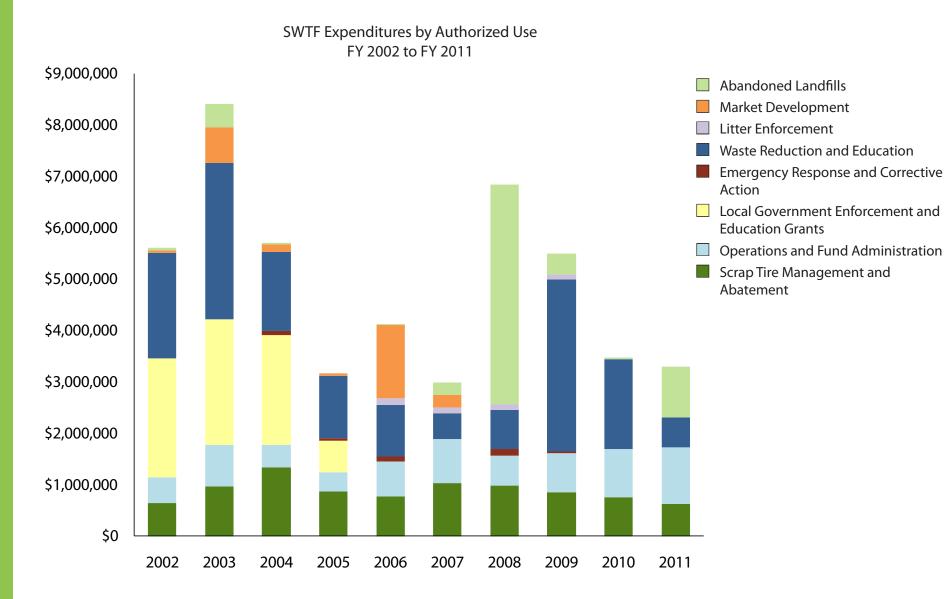
Appropriation for FY 2011

The General Assembly appropriated \$722,139 from the Solid Waste Trust Fund to clean up illegal scrap tire dumps, properly close abandoned landfills, fund waste reduction and recycling programs and administrative and operational costs for FY 2011.





EXPENDITURES BY AUTHORIZED USE



SCRAP TIRE CLEAN UP AND MANAGEMENT

EPD began the Scrap Tire Management Program in 1992 to help ensure scrap tires generated in Georgia are recovered for reuse.

Since then, more than 14.4 million scrap tires have been removed from illegal tire dumps and used either as raw material for new products or as a source of fuel. Based on EPD estimates, of the 9.6 million scrap tires generated in Georgia in FY 2011, 8.5 million were recovered for reuse.

This high rate of recovery is achieved using a combination of tools, including permitting, compliance monitoring, outreach and enforcement.

The program maintains a registry of tire retailers and other businesses (such as public and private fleet

owners) that generate scrap tires. In FY 2011, 758 new generators were added to the registry. By the end of the fiscal year, there were 7,347 registered scrap tire generators in Georgia.

These generators are responsible for collecting the \$1.00 fee from consumers on each new replacement tire sold and submitting the collected fees to EPD four times a year. One member of the program ensures that fees are received from all registered generators.

EPD also tracks the number of businesses that transport scrap tires (38 new, 175 total); sort the tires (10 new, 57 total); and process or recycle the tires (1 new, 35 total). Two members of the program are responsible for issuing permits to these scrap tire handling businesses. Another way EPD ensures the businesses remain in compliance with the state's scrap tire laws is through on-site visits. Each year, six EPD field personnel perform routine inspections of scrap tire related businesses across the state. In FY 2011, there were 2,799 such visits.

These staff members also make educational outreach visits to provide any updates to the laws pertaining to scrap tires and to help educate local government employees on how to handle cases involving scrap tire dumping in their jurisdictions. There were 266 outreach visits in FY 2011.



Police catch Henry County tire dumping suspect

In December 2010, police in Hampton said they caught a man dumping scrap tires on private property (see photo at left). According to investigators, he had unloaded around 7,500 tires before police appeared.

The suspect, who worked for a permitted scrap tire carrier, was licensed and bonded to pick up scrap tires and haul them to a processor. Instead, officers said, he admitted to bringing three truckloads to the Henry County site from businesses in DeKalb, Fulton and Cobb counties that believed the tires were being taken to a processor.

He faces two counts of unlawful dumping and one count of unlawful disposal of solid waste.

SCRAP TIRE MAPPING PROJECT

The sight of tires dumped on the side of a road is, unfortunately, a common occurrence. However, the thousands of tires hidden deep in the woods and concealed in buildings reveal the surprising magnitude of the illegal dumping problem in Georgia.

When a tire dumper is not caught, the burden to clean up the pile falls either to the local government or to the owner of the property where the tires were found. If neither can afford to remove the tires, then the site becomes the responsibility of the state.

To better illustrate the rampant dumping, EPD began mapping the scrap tire dump sites. Field personnel from EPD offices around the state and code enforcement officers from local governments traveled down dirt roads, searched through abandoned buildings and waded into streams in search of illegal tire piles.

When a site was found (like the one in the photo at right), the number of tires was estimated, the geographic coordinates were taken and the pile was photographed. This information was then added to a map of the state.

This information will help EPD plan its budget for scrap tire clean ups and prioritize clean-up requests.

Bacon County

More than 6,000 scrap tires were



Scrap tire dumps pose risks to human health and the environment

When not properly managed, scrap tires pose a fire risk from a lightning strike or careless activities. Tire fires are difficult and costly to extinguish, and often result in the evacuation of nearby residences.

When burned, tires break down into hazardous compounds that can pollute the air, soil and

water and pose threats to human health. For example, according to the U.S. EPA, for every one million tires consumed by fire, about 55,000 gallons of oil is produced. If not captured, this oil will soak into the ground polluting the groundwater and run off into streams and other surface waters.

Tire dumps that are near homes present additional potential dangers, as they create the perfect habitat for snakes and disease-carrying pests, such as mosquitoes and rodents.

SOLID WASTE REDUCTION AND RECYCLING

Staff members in EPD's Waste Reduction and Abatement Program respond to inquiries about waste reduction and recycling from businesses and the general public; participate in local, state and national initiatives that promote waste reduction; and manage special projects on specific waste reduction issues.

RECYCLING AND SOLID WASTE INFRASTRUCTURE

In FY 2011, EPD began a project to map Georgia's recycling and solid waste infrastructure. When complete, the map will show the location (and other details) of landfills, recycling businesses, and manufacturing facilities that use recovered materials to make new products.

This map will allow EPD to better assist new businesses considering locating in Georgia, promote the state's robust recycling industry, and provide immediate access to data for emergency responders.

FOOD RESIDUALS DIVERSION

In FY 2011, staff members continued work on a project looking at options for diverting food residuals from landfills, part of a larger initiative funded by a \$45,000 grant from EPA.

The manager of the Waste Reduction Unit participated in conferences and webinars to discuss EPD's work to update its composting rule and the division's efforts, in conjunction with the U.S. Composting Council, to develop a model rule or template that could be referenced by other states.

As part of the model rule project, regulatory officials and managers of composting operations around the country were invited to share their recommendations in a series of in-depth interviews.

By incorporating the recommendations and best practices of experts across the U.S., the model rule will help states promote composting as a viable business opportunity and develop markets for the finished product.

LOCAL GOVERNMENT EDUCATION

In conjunction with the Georgia Recycling Coalition, EPD sponsored an issues forum in June where local governments learned about legislative changes related to waste reduction and recycling made during the 2011 legislative session.

TECHNICAL ASSISTANCE

In FY 2011, the unit responded to more than 160 requests for technical assistance, including questions about recycling various materials, legislation, grant availability, composting, e-scrap recycling business development, and managing yard trimmings.

In-depth market development assistance was also provided to two companies considering locating a new joint facility in Georgia. Staff members helped gather and map information on the availability of materials required for the company's processes.



SOLID WASTE EDUCATION AND OUTREACH



A public that has an awareness of environmental issues—as well as the knowledge and skills to make informed decisions and take responsible actions—is vital to maintaining public health and the quality of the environment. With this in mind, EPD created two education programs to deliver environmental education resources to educators and schools.

The **Georgia Green & Healthy Schools** program helps K-12 schools understand and practice environmentally sound principles. By incorporating public health and environmental safety, and integrating concepts from a variety of disciplines, the program broadens the scope of traditional environmental education.

93 schools or two issues, the program takes into account the complex nature of schools and works with teachers, school nurses, facility managers and others who are directly related to the environmental issues a school faces. By the end of FY 2011, 34 ea schools were enrolled in the program.

EEinGeorgia.org serves as the online guide to environmental education in the state. By the end of FY 2011, the Web site's directory of organizations contained 400 state agencies, nonprofits, and other groups offering environmental education resources and events and 93 schools had created profile pages to showcase their green activities.

Classroom teachers, home-school and non-formal educators (such as scout leaders and nature center staff) rely on the site to find environmental

EEinGeorgia.org

228,441 page views

5,303 subscribers

400 organizations

1,169 events

FY 2011

education lesson plans, curriculum guides, grants, awards and outreach programs. In FY 2011, visitors to the site viewed 228,441 pages, an average of 19,037 pages per month.

A calendar showing workshops, conferences, professional learning courses and activities that appeal to anyone with an interest in environmental education, featured 1,169 such events in FY 2011. An electronic newsletter containing the most recent additions to the site was emailed to subscribers

each month. By the end of FY 2011, there were 5,303 subscribers, an increase of 11 percent from FY 2010.

Although each program has only one full-time staff member, they both participate and present at conferences and workshops throughout the year. In FY 2011,

EEinGeorgia.org

- Makes it easy for teachers to find K-12 lesson plans for environmental education
- Gives nature centers an opportunity to promote their outreach programs
- Helps homeschool parents locate nearby parks, museums and nature centers
- Provides schools a place to showcase their green successes
- Promotes upcoming conferences, workshops and other professional learning events for educators
- Offers the latest news on grants, awards and contests

this included events sponsored by the Georgia Independent School Association, Georgia Science Teachers Association, and the Environmental Education Alliance of Georgia.

ABANDONED LANDFILL CARE AND CLEAN UP





For more than 10 years, the Kersey-Firetower Road tire landfill in Upson County operated as a legally-permitted dumping ground for scrap tires.

By the time it closed, and was subsequently abandoned in 1996, the nine-acre site contained approximately 3.6 million tires, many of which were simply dumped over the edge of steep slopes into large gullies (see photo upper left).

When the "cover" (usually composed of layers of soil, a synthetic fabric cap, and specific types of vegetation) is not maintained on a landfill, conditions can deteriorate rapidly.

At the Upson County site, erosion from years of rain caused many once buried tires to become exposed. These exposed

tires, along with uncontrolled brush, increased the risk of fire. Given the state of the landfill, EPD sought funding to clean up the site and thus minimize the risks to human health and the environment.

The price to excavate, clean, transport and recycle the tires was estimated at more than \$8 million. Because this plan was not economically feasible, EPD selected the next option — to properly close the landfill (i.e., stabilize and bury all tires and establish permanent vegetation on the surface). The cost for this plan was estimated at \$1.7 million.

In FY 2010, EPD contracted with a firm to prepare the closure plan and monitor work performed by the primary construction contractor.

Before

Scrap tires were thrown into gullies with eroded slopes.

ABANDONED LANDFILL CARE AND CLEAN UP



In FY 2011, the construction contractor was selected. To date, the contractor has:

- Established erosion and sedimentation controls
- Cleared and graded the site
- Installed a synthetic fabric on top of the buried tires to help stabilize the site
- Covered the fabric with soil

Once permanent vegetation is established, the contractor will submit a final certification report to EPD. When EPD approves this report, construction activities will officially be completed.

The construction contractor will then begin a 12-month period of inspections and maintenance. At the end of this period, EPD will release the final payment, which will mark the end of the project.



After

After the site was cleared and graded, erosion controls were installed. The tires were then covered and the ground seeded.