

Why Georgia needs the Solid Waste Trust Fund



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Georgia Department of Natural Resources
January 2008

Why Georgia Needs the Solid Waste Trust Fund

EXECUTIVE SUMMARY

The Georgia Environmental Protection Division created this document to explain the purpose and uses of the Solid Waste Trust Fund (SWTF), how the funds have been invested, and why Georgia still needs the fund.

The Solid Waste Trust Fund was established in 1990 as part of the Georgia Comprehensive Solid Waste Management Act. This Act, along with its amendments, provides a framework for guiding how solid waste is to be managed in the state.

Authorized uses of the trust fund include scrap tire management and cleanup; closure of abandoned landfills; grants to local governments for waste reduction and recycling; emergency, preventative and corrective actions at solid waste facilities; market development for recycled-content products; solid waste education and enforcement; and litter prevention and abatement.

Since 1992, the trust fund has:

- removed 14,000,000 scrap tires from illegal dumps across the state
- protected the safety of our citizens and environment by ensuring the safe management of landfills and the ability to respond to solid waste emergencies and abandoned landfills
- provided grants to 269 local governments to build recycling infrastructure — most of these communities would otherwise have been unable to offer recycling services
- provided more than \$12.5 million to local governments to clean up illegal scrap tire piles and enforce solid waste laws
- developed training and other resources on waste reduction and litter prevention to augment local government services.

While maintaining activities to ensure the safe management of landfills and the nine million scrap tires generated in the state each year, funds are now being invested to address critical solid waste challenges facing the state — abandoned landfills, the widespread litter problem, and the high per capita waste disposal rate.

Unless the trust fund is reauthorized in 2008, EPD and its partners will be unable to sustain these efforts. The loss of the trust fund could:

- negatively impact the health and safety of our citizens, our quality of life and our economy
- lead to a resurgence in scrap tire dumps, resulting in an increased risk of fires and mosquito-borne diseases such as the West Nile Virus
- increase waste being disposed in Georgia landfills, resulting in increased fuel consumption, air pollution and greenhouse gas emissions associated with the transportation of waste to landfills and a reduction in the availability of recovered materials needed by Georgia industries
- hinder the ability of the state, as required by the Act, to respond to solid waste emergencies, issue solid waste permits to local governments and the private sector, and care for abandoned landfills
- decrease environmental education, enforcement and outreach efforts, resulting in an increase in illegal dumping and litter, which would lessen the quality of life, lower property values and discourage businesses from locating in Georgia.

The SWTF must be reauthorized during the 2008 legislative session to sustain the funding source needed to meet Georgia's solid waste challenges.

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This circa-1990 dump in Long County that contained upwards of 25,000 tires (one of the smaller dump sites) was typical of the illegal dumping problem prior to the establishment of the Solid Waste Trust Fund.

What is the Solid Waste Trust Fund?

The Solid Waste Trust Fund (SWTF) was established in 1990 as part of the Georgia Comprehensive Solid Waste Management Act. This Act, along with its amendments, provides a framework for guiding how solid waste is to be managed in the state. An amendment to the Act in 1992 established a \$1 fee for every new tire sold in the state as the primary source of funding for the SWTF.

Each year, fees collected the previous year are available for appropriation by the Legislature to the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources (DNR), whose director is authorized by the Act to serve as the trustee for the fund. The monies allocated to the trust fund are then used to carry out the solid waste management goals of the Act.

Why was it initially established?

A combination of events in the early 1990s, including a lack of permitted landfill disposal capacity in the state, a widespread scrap tire dumping problem, and a devastating fire involving more than three million scrap tires, prompted the General Assembly to pass legislation that created a trust fund to help Georgia address these and other solid waste problems.

What are its authorized uses?

Authorized uses of the trust fund include emergency, preventative and corrective actions at solid waste facilities; scrap tire management and cleanup; closure of abandoned landfills; grants to local governments for waste reduction and recycling; market development for recycled-content products; solid waste education and enforcement; litter prevention and abatement; and administrative costs associated with managing the trust fund.

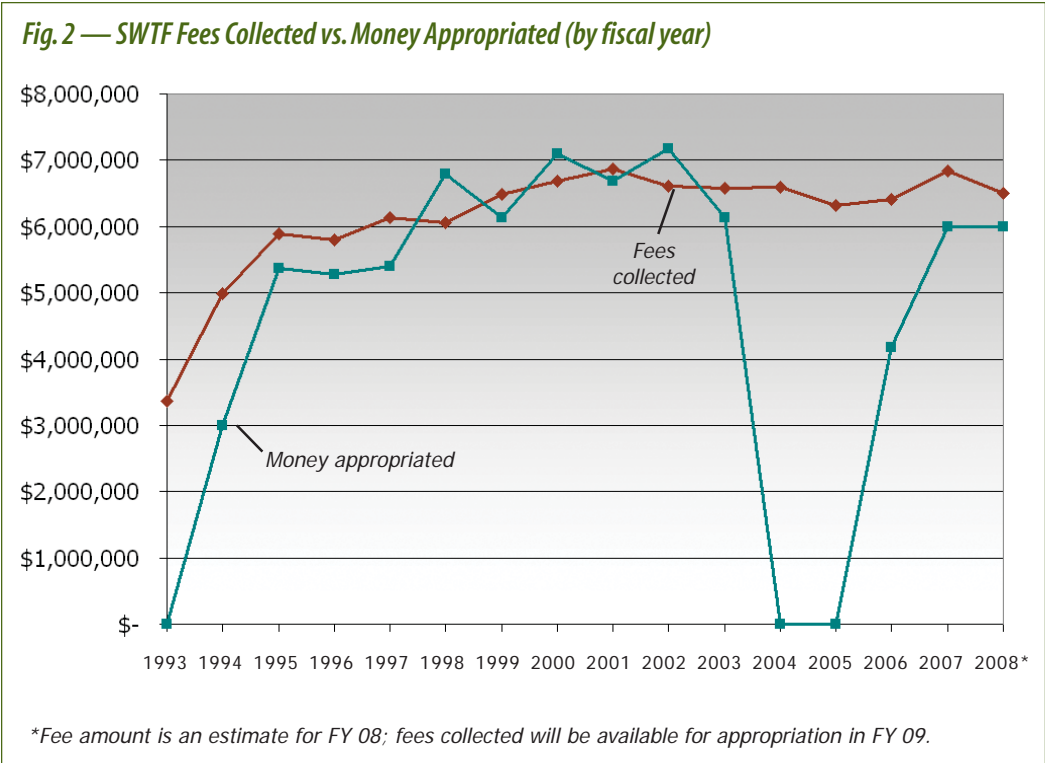
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How is the SWTF funded?

A 1992 amendment to the Act established a \$1 fee for every new tire sold in the state as the trust fund's primary source of funding. Each year, fees collected the previous year are available for appropriation by the Legislature to EPD. Fines collected for violations of the Act are also deposited in the fund.

How much money has been collected from tire fees and appropriated to the fund?

As of June 30, 2007, the revenue collected from tire fees was \$91,591,828; the total amount appropriated to the SWTF was \$75,237,629. Figure 2 shows the breakdown of fees collected versus money appropriated by fiscal year.



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How does EPD work with other state and local government entities to manage the state's solid waste?

DNR's Environmental Protection Division oversees regulations, permits, compliance monitoring, enforcement and cleanup activities; administers the Solid Waste Trust Fund; and coordinates with state agencies and local governments to achieve a unified and effective solid waste management program.

The Department of Community Affairs coordinates the update to the state's solid waste management plan, assists local governments with solid waste planning, and provides technical assistance and education to local governments and the public.

The Georgia Environmental Facilities Authority provides loans and grants for solid waste infrastructure to local governments and solid waste authorities.

DNR's Pollution Prevention Assistance Division provides assistance to industries, businesses and institutions to reduce solid waste and coordinates market development efforts.

Local governments and solid waste authorities are responsible for solid waste planning, collection, recycling and disposal services in their jurisdictions.

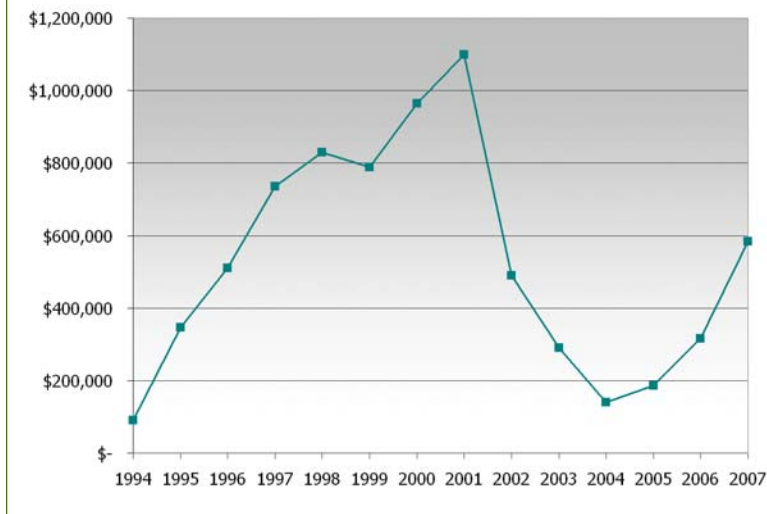
Who decides how the money from the SWTF is used?

The director of EPD serves as trustee of the fund. The law requires EPD to coordinate with the Department of Community Affairs (DCA) and the Georgia Environmental Facilities Authority (GEFA) on solid waste management issues. Based on state priorities, and in accordance with the authorized uses of the trust fund, EPD develops an annual spending plan with input from these agencies, as well as from the Georgia Department of Natural Resources' (DNR) Pollution Prevention Assistance Division (P²AD). This spending plan is presented to the state Office of Planning and Budget as part of the overall funding package for EPD. If the Legislature appropriates money to the trust fund, the spending plan is presented to the DNR Board for approval in accordance with the law. EPD provides an annual report to the Legislature on how the funds were used.

How much interest has been earned on the trust fund and how is it used?

The SWTF has earned \$7.4 million in interest as of June 30, 2007 (see Fig. 3). The law states that interest be used to administer EPD's Solid Waste Management Program. EPD uses the interest for staff and operating expenses associated with solid waste permitting, compliance monitoring and assistance, and enforcement. Any remaining funds not used in the fiscal year in which they are generated revert to the state treasury (the principal is unaffected).

Fig. 3 — Interest Earned on SWTF (by fiscal year)



Why Georgia Needs the Solid Waste Trust Fund

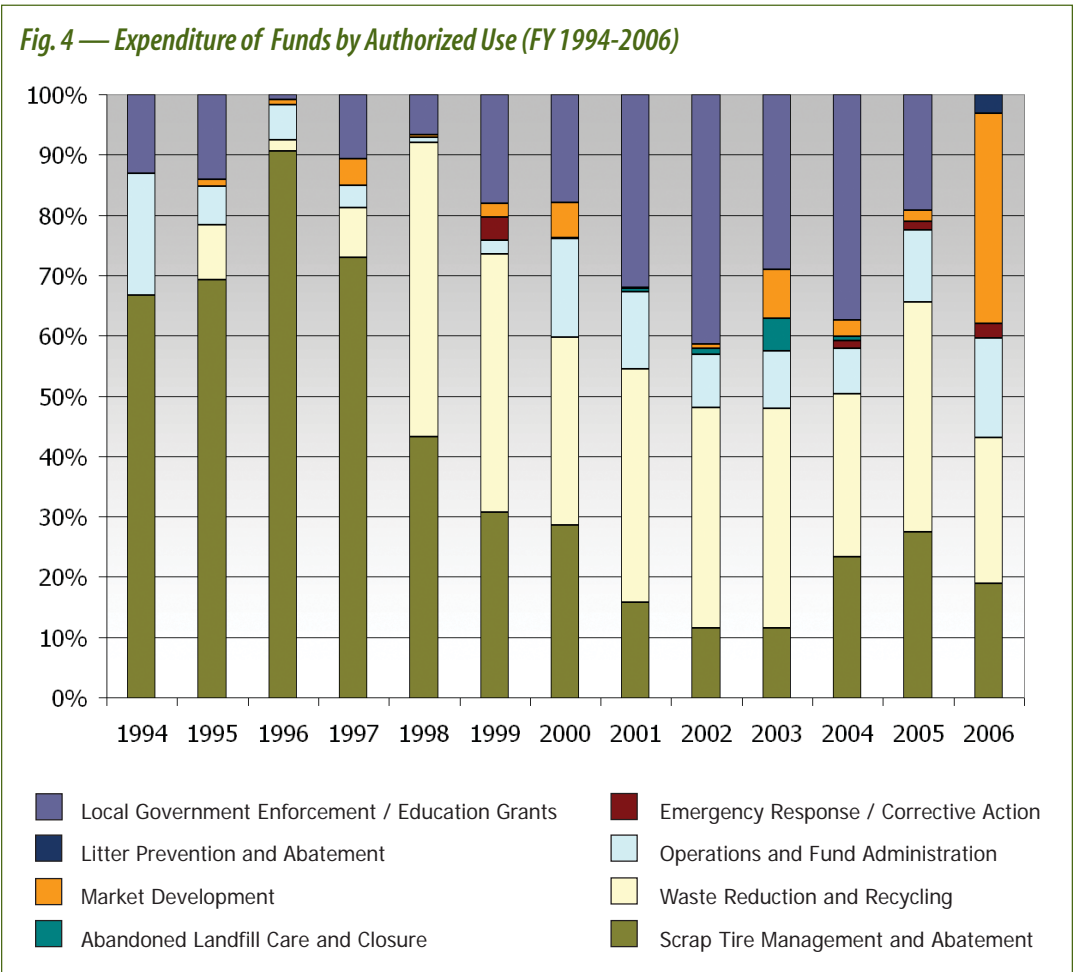
How have the funds been spent?

Between FY 1994 and 2006, \$59.5 million was spent on the following authorized uses:

- \$19.1 million (32%) on scrap tire management and abatement
- \$18.8 million (32%) on waste reduction and recycling
- \$12.5 million (21%) on local government enforcement and education grants
- \$4.8 million (8%) on program operations and fund administration
- \$3.1 million (5%) on market development
- \$579,230 (1%) on abandoned landfill care and closure
- \$451,471 (1%) on emergency response and corrective action, and
- \$129,834 (<1%) on litter prevention and abatement.

More than 50% of the money expended between FY 94-06 went directly to local governments.

Figure 4 shows a breakdown of expenditures by authorized use between FY 94-06.



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What are the current funding priorities?

During its first few years, the trust fund was used primarily to clean up large stockpiles of illegally dumped scrap tires. As the cleanup of these dumps progressed, EPD created a scrap tire management program to help prevent stockpiles from recurring and began funding other, more proactive, authorized uses of the trust fund.

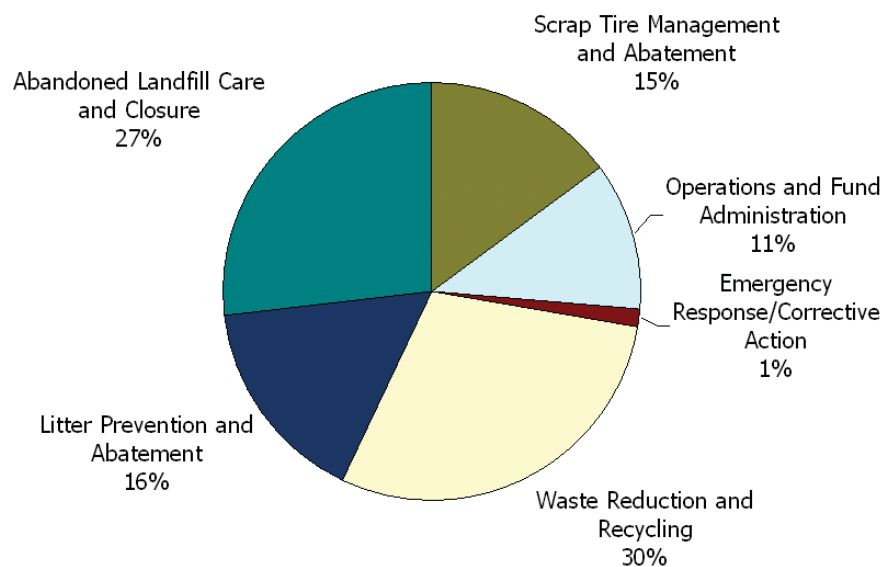
For example, in 1995 EPD began awarding GEFA money for grants to local governments to implement waste reduction programs and build recycling infrastructure.

In July 2005, the Governor's Environmental Advisory Council was charged with examining the performance, issues and future uses of the trust fund. While recognizing the value of the current programs funded by the SWTF, the council also strongly encouraged the creation of a comprehensive solid waste strategy to address critical solid waste issues facing the state — e.g., the rising per capita waste disposal rate, increases in the importation of out-of-state waste, and management of abandoned landfills.

Today, EPD strives to achieve the appropriate balance between waste prevention and management and clean up activities. For fiscal years 2007 and 2008, \$17.2 million (see Fig. 5) has been allocated to address five priority areas:

- scrap tire management and abatement
- waste reduction and recycling
- abandoned landfill care and closure
- emergency response and corrective action, and
- litter prevention and abatement.

Fig. 5 — Budget for Fiscal Years 2007 and 2008 by Authorized Use*



*Total budgeted for FY 2007 and FY 2008 is \$17.2 million.

Why Georgia Needs the Solid Waste Trust Fund



Nearly all of the nine million scrap tires generated in Georgia each year are now recovered, creating a vibrant scrap tire processing industry in the state.

What has been achieved so far?

Scrap tire management and cleanup

Since 1992, almost 14 million scrap tires have been removed from dumps across the state. Due to EPD's efforts to track scrap tires from point of generation to point of disposition, and ensure compliance with state regulations, approximately 95-97% of the nine million scrap tires generated annually in the state are recovered and recycled into new products or used as an alternative fuel source. The job of finding and cleaning up legacy tire dumps continues today, as well as managing the 3-5% of tires that are illegally dumped.

Waste reduction

More than \$23.8 million has been invested to promote waste reduction in Georgia — targeting homes, commercial businesses, manufacturers, utilities, and special events — and spur the development of markets for recycled-content products.

Since 1995, the Georgia Environmental Facilities Authority (GEFA) has awarded 269 waste reduction and recycling grants totaling almost \$11 million to local governments. Without these grants, which are used to implement or expand solid waste and recycling programs, many local governments would have been unable to offer recycling services to their residents.

From FY 06 to 08, the trust fund provided \$1 million for a statewide campaign to increase public awareness about recycling; \$350,000 to facilitate recycling at special events; \$650,000 to continue the GEFA waste reduction and recycling grants to local governments; and \$300,000 to the Georgia Department of Corrections to continue waste reduction and recycling initiatives in the state prison system.

In FY 08, DCA awarded \$2.2 million from the trust fund to Savannah, Bulloch County, Griffin and Valdosta to construct new or expand existing facilities that will serve as the initial framework of a statewide network of regional collection hubs for commingled recyclables. These regional recycling hubs will reduce transportation and other recycling costs, making it more viable for communities to offer recycling and for industries to obtain recovered materials. Based on their grant proposals, DCA estimates that these communities will increase recycling rates by 185% with a return on investment of less than three years. DCA also estimates that every dollar invested from the trust fund will be matched with four dollars from private organizations and/or the local government.

Environmental education is an integral component of the state's effort to reduce waste and the Solid Waste Trust Fund provides funding for several important programs targeted at K-12 educators in both schools and nontraditional classroom environments, including a program to help schools reduce waste and conserve natural resources.

A total of \$3.3 million in grants have been awarded to local governments and state agencies to develop markets for recovered materials and stimulate economic development in the scrap tire industry. Projects included installing walking tracks made from recovered scrap tires and using shredded and dyed scrap tires as mulch for residential and commercial landscaping and in state roadway projects.

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Enviro-Log, produced in Fitzgerald, is an environmentally-friendly product produced from scrap wax-coated cardboard containers used to transport perishable foods.

Using trust fund dollars, DNR's Pollution Prevention Assistance Division (P²AD) develops programs that encourage cost-effective waste reduction activities in the commercial and manufacturing sectors. By providing businesses with the tools and assistance to help them reduce waste and conserve natural resources, businesses operate more efficiently and are more competitive in the marketplace.

For example, P²AD helped two Georgia businesses divert their scrap plastic, keeping 10.75 million pounds of plastic out of the landfill and saving \$160,000 per year in avoided disposal costs. One of the companies also generates an estimated \$165,000 per year from the sale of the material. P²AD also helped a produce packing company divert 1,080 tons of wax-coated cardboard a year to Enviro-Log, a manufacturer in south Georgia that uses the material to make synthetic fire logs, saving the produce company \$86,400 a year through avoided disposal costs.

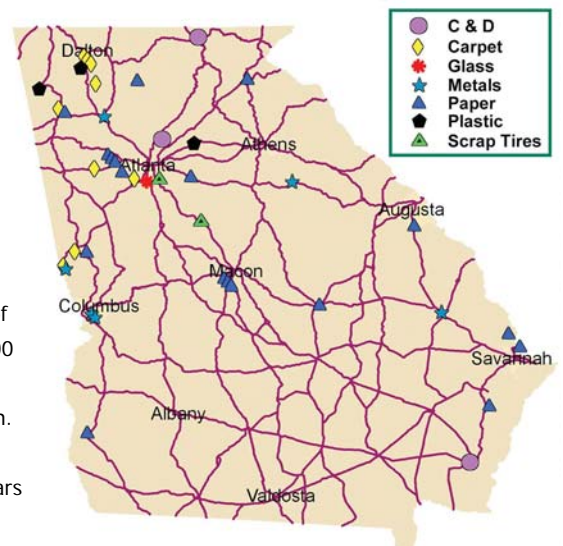
P²AD also has used trust funds to fund research on electronics, drywall, engineered wood products and compost. The practical results from these studies will lead to an estimated 200,000 tons of material diverted from the landfill, market development, and eventually job creation. The research also is being used to predict the economic impacts to state. For example, the electronics model suggests that the electronics scrap recycling industry may generate net revenues in excess of \$5 million per year.

Did you know that recycling creates jobs, protects the environment and saves energy?

Recycling is not only a key strategy in reducing waste, but it also supports the economy of the state by creating jobs. Georgia's robust recycling industry is home to more than 50 manufacturers that use recovered materials in their processes (see image below). A 2004 study, funded by the trust fund, calculated the lost economic value of the 2.6 million tons of easily recyclable commodities currently discarded in Georgia's municipal solid waste stream at more than \$250 million per year. These commodities, if not disposed, could be used by many of Georgia's traditional industries (e.g., paper and carpet manufacturers).

However, the limited infrastructure to collect and process recovered materials in the state forces Georgia industries to import recovered materials from other states to get sufficient feedstocks to run their manufacturing processes. By expanding the infrastructure in the state and increasing the availability of local recyclable materials, industries will reduce natural resource consumption and reduce pollution due to shorter hauling distances and potentially reduce the manufacturing costs of their products, thus increasing their competitiveness.

Recycling helps protect the environment and save energy. Not only are valuable natural resources saved through the reuse of materials, large amounts of energy also are saved, primarily by replacing virgin feedstocks with recovered materials. If Georgia recycled 10% of the easily recyclable materials currently being disposed, it would be equivalent to saving 50 million gallons of gasoline each year. In addition, more than 850,000 metric tons of annual greenhouse gas emissions would be avoided by reduced energy consumption. This would have the same positive environmental benefits as taking more than 93,000 passenger cars off the road each year.



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Leachate from the abandoned Scales Road landfill in DeKalb County.

Closure of abandoned landfills

The Act states that the trust fund may be used to take care of problematic abandoned solid waste disposal facilities. In 2003, approximately \$435,000 from the trust fund was used to close an abandoned scrap tire landfill in McDuffie County.

In March 2007, EPD awarded a \$4.9 million contract (\$4.4 million from the trust fund) to close the Scales Road construction and demolition landfill in DeKalb County. The landfill, abandoned by its bankrupt owners, contains approximately two million tons of decaying waste. Since the landfill was not properly closed, environmental conditions at the site deteriorated. Leachate is severe, erosion has exposed previously covered waste, and two fires have occurred on the site. Properly closing this landfill will minimize risks to the more than 10,000 people who live within a two-mile radius of the site and mitigate environmental hazards to surface water, groundwater and air quality.

Local government enforcement and education grants

In 1994, EPD established the Local Government Enforcement and Education Grant Program to provide seed money to local governments to combat illegal dumping, perform compliance monitoring, offer technical assistance and provide environmental education. By the time the program ended in FY 05, EPD had awarded more than \$12.5 million in grants.

Solid waste emergencies

Since 1993, the trust fund has been used to respond to tire fires, control dangerous methane gas migration from landfills, properly dispose of abandoned solid waste, and extinguish fires at landfills where responsible parties are unknown, unwilling or unable to act. Since emergencies cannot be predicted, EPD keeps funds in reserve to respond to emergencies, when and if the need arises. Examples include:

- In 1992, a large dump containing approximately three million scrap tires caught fire and burned for several weeks near the city of Palmetto in Coweta County. This huge fire choked the air with thick clouds of black smoke for weeks and contaminated ground and surface waters with a toxic by-product. U.S. EPA spent approximately \$2 million from the federal Superfund program to extinguish the fire; EPD spent an additional \$2.5 million from the trust fund to clean up the remaining tires at the site.
- In 2007, during development of a new subdivision being built around the abandoned Miller/Trammel Road Landfill in Forsyth County, environmental monitoring showed that explosive levels of methane had migrated underground to subdivision lots. The developer filed for bankruptcy in March 2007 and abandoned the site. EPD hired a contractor to install monitoring wells, evaluate methane levels, and recommend corrective actions needed to protect nearby residents and an elementary school from the threat of methane gas explosions. Approximately \$33,000 of the trust fund's emergency reserve has been used for this project to date; additional funds may be needed in FY 08 to install a methane venting system.

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Litter prevention and abatement

Litter costs Georgia by harming the environment, creating serious roadway hazards, reducing property values, and creating a negative impression of our state to visitors and prospective new industries. Managing litter costs state and local governments millions of dollars each year to clean up. The Georgia Department of Transportation alone spends more than \$14 million each year to remove litter.

Launched in August 2006 under Governor Sonny Perdue's leadership, the statewide litter campaign, "Litter. It Costs You," takes an integrated and comprehensive approach to combat litter through education, enforcement and eradication efforts. In FY 07 and 08, \$2.5 million from the trust fund was invested in the campaign. The campaign also leverages resources from state agencies, local governments, non-governmental organizations and private industries. Since the enactment of the 2006 Comprehensive Litter Prevention and Abatement Act, funds have been used to train more than 500 prosecutors, judges, code enforcement and local government officials on their roles in preventing litter and improving the quality of life in Georgia.

Each April, thousands of Georgians take part in the Great American Cleanup, a national community improvement campaign started by Keep America Beautiful in 1999. In 2007, 50,853 volunteers representing more than 356 communities worked 228,963 hours picking up litter from Georgia's roadways and cleaning up illegal dumpsites. Nearly 2,000 tons of waste were removed and properly disposed. More Georgians and communities participated in the 2007 event than ever before with 86% of Georgia counties holding a litter reduction activity. SWTF moneys are used to provide assistance to the organizations that coordinate events.

DNR's Wildlife Resources Division (WRD) receives trust fund dollars to support its efforts to enforce the state's litter laws. In the course of their day-to-day duties, WRD rangers frequently come across litter and solid waste dumping violations in remote areas (like those below in Wayne and Chatham counties) that might otherwise go undiscovered. Violators are prosecuted, fined, and often must clean up the waste themselves. WRD rangers issued 5,027 citations for littering, illegal dumping and burning of waste between FY 03-07.



Trust fund money goes to WRD to support enforcement of the state's litter laws.

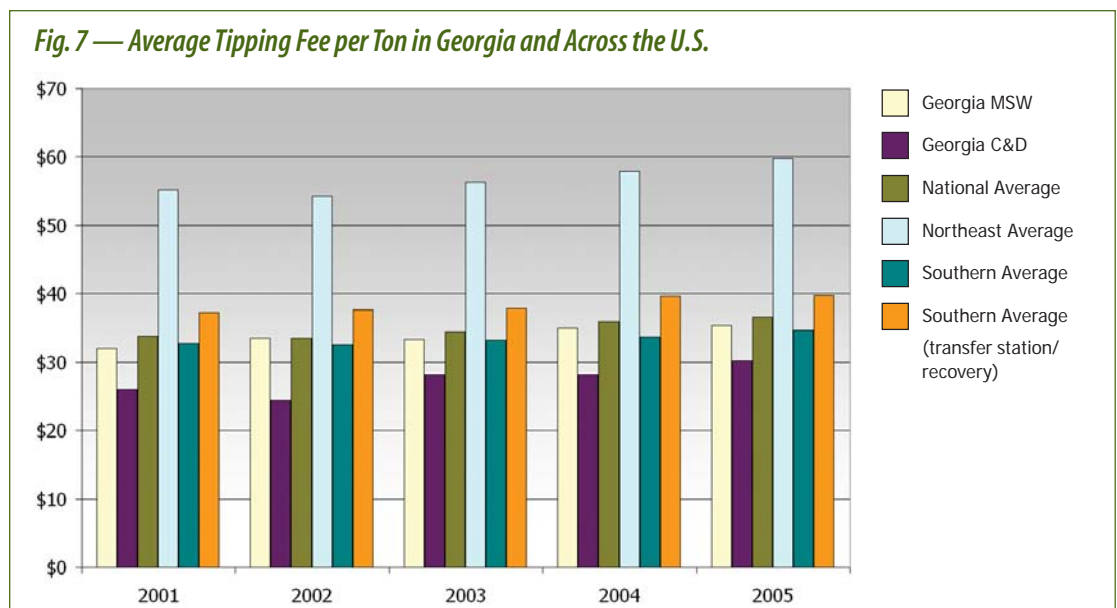
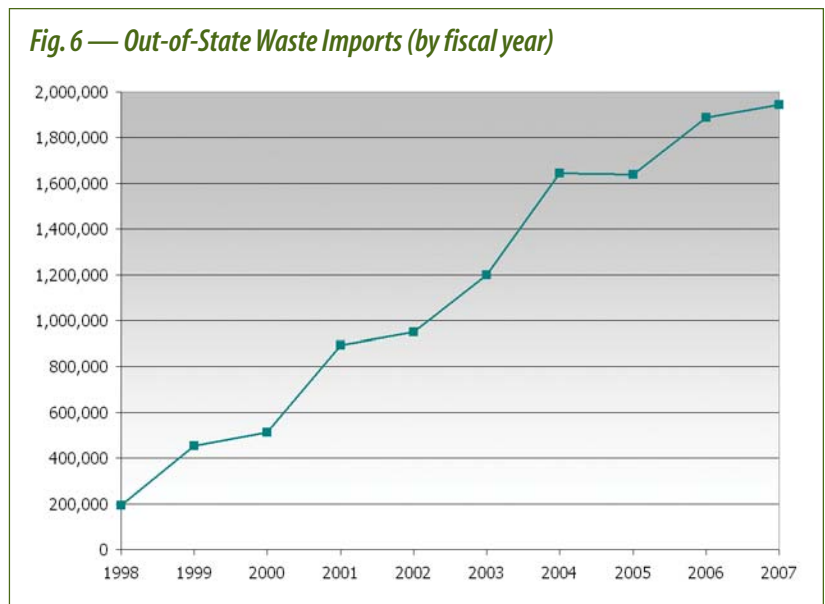


Why Georgia Needs the Solid Waste Trust Fund

What are the solid waste challenges facing Georgia today?

Managing solid waste is a complex issue and there are many challenges the state must address in order to meet its solid waste management goals. Georgians are disposing of more solid waste than ever — more than 17 million tons in 2007. On average, each Georgian disposes of 6.6 pounds of waste per day — more than twice the national figure. Importation of waste from out of state is increasing — almost two million tons of waste were imported to landfills in Georgia in FY 07 (see Fig. 6). Factors that may bear on these issues include excess landfill capacity and low solid waste tipping fees in the state (see Fig. 7).

Other challenges include an increase in littering and illegal dumping and a decrease in the number of recycling programs throughout the state. Direct monetary challenges include the high long-term costs of cleaning up and caring for abandoned landfills.



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“An Ounce of Prevention Is Worth a Pound of Cure”

EPD estimates that it costs \$0.05 per tire to properly manage and prevent illegal dumping of tires compared to \$1.49 per tire to clean up tire piles.



How is the trust fund being invested to help meet these challenges?

Overcoming the challenges facing the state requires a clearly defined strategy and coordination between state agencies, local governments and businesses.

The Governor’s Environmental Advisory Council (EAC) was charged in July 2005 with examining the performance, issues and future uses of the SWTF. The council encouraged the creation of a comprehensive solid waste strategy that includes performance goals and metrics to address the solid waste challenges facing Georgia.

EPD is dedicated to developing and implementing such a plan. EPD will continue to seek input from the EAC and other stakeholders as we move forward, since managing solid waste is the responsibility of multiple agencies, as well as the general public, local governments and the business community.

The new comprehensive strategy will continue the efforts to prevent scrap tire dumps and clean up existing sites; target other materials for diversion from the waste stream; set waste reduction goals (see Fig. 8); address the problem of abandoned landfills; examine the impact of low solid waste tipping fees; and increase the public’s commitment to waste reduction, recycling and litter prevention.

Fig. 8 — Georgia’s Per Capita MSW Disposal Rates and New Waste Reduction Goals by Commodity

Commodity	Actual Disposal 2004 (lbs/person)	Projected Disposal 2012 (lbs/person)	Projected Reduction 2012 (%)	Projected Disposal 2017 (lbs/person)	Projected Reduction 2017 (%)
Glass	0.153	0.140	8%	0.140	8%
Paper	1.181	1.000	15%	0.850	28%
Metal	0.228	0.198	13%	0.186	18%
Plastic	0.663	0.560	16%	0.530	20%
<i>Total</i>	<i>2.230</i>	<i>1.990</i>	<i>11%</i>	<i>1.710</i>	<i>23%</i>

Source: Georgia Department of Community Affairs

Why Georgia Needs the Solid Waste Trust Fund



The SWTF has made it possible for Georgia to address critical solid waste management needs that would have suffered without such a dedicated funding source. For example, the state is spending \$4.4 million from the trust fund to properly close the abandoned Scales Road landfill in DeKalb County.

What would happen in Georgia without the Solid Waste Trust Fund?

The state is making progress on proactively managing solid waste. Unless the trust fund is reauthorized in 2008, EPD and its partners would be unable to continue to make the progress we need in reducing solid waste disposed and keeping our environment and citizens healthy. The loss of the trust fund could negatively impact the health and safety of our citizens, our quality of life and our economy.

- Specifically, a resurgence in scrap tire dumps could result in more cases of mosquito-borne diseases such as the West Nile Virus and Eastern Equine Encephalitis and increase the risk of tire fires, resulting in air pollution and water contamination.
- Without the proactive and sustained focus on waste reduction and recycling, more waste would be disposed in Georgia landfills, resulting in increased fuel consumption, air pollution and greenhouse gas emissions associated with the transportation and disposal of waste in landfills. Disposing of more waste could reduce the available supply of items needed by Georgia industries as raw material and force these businesses to either use virgin resources or purchase recovered materials from other states — adding costs for transportation and increasing pollution from longer hauling distances.
- A decline in environmental education, enforcement and outreach efforts could increase illegal dumping and litter, which could decrease property values, lower quality of life and discourage economic development.
- The loss of the infrastructure to collect and track the management of scrap tires could harm the scrap tire processing industry in the state that provides tire derived fuel and other products to Georgia industries.
- The inability to respond to emergencies at landfills and to clean up abandoned landfills could increase the risk of fires and explosions, straining local resources until a funding source is found.
- A loss of funds could impede EPD's ability to process solid waste permits, hindering local government and private sector applicants' ability to meet their commitments.

Since 1992, the Solid Waste Trust Fund has worked to ensure the safety of Georgia landfills, and consequently, the safety of our citizens; remove millions of scrap tires that littered the state; and provide grants to state agencies and local governments to improve solid waste management and recycling across the state.

But, the work is not over. As this report has shown, in addition to continuing the good work that has already been done, there are several major issues that remain to be addressed. Abandoned landfills pose environmental and health risks; the per capita disposal rate for municipal solid waste is more than double the national rate; and cheap disposal costs encourage importation of waste from other states and discourage recycling.

These issues, however, cannot be managed in isolation. Development of a comprehensive strategy is a long-term project that will continue into FY 08, however, with the Solid Waste Trust Fund set to expire in 2008, the fate of these new activities, as well as the current programs, is unknown. To ensure the continued best management of solid waste in Georgia, the SWTF must be reauthorized to provide a stable source of funding for these vital initiatives.

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FOR MORE INFORMATION

For more information about the Solid Waste Trust Fund or this report, please contact the Georgia Environmental Protection Division at (404) 362-2537.

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This report was published January 2008 by the Environmental Protection Division of the Georgia Department of Natural Resources and also is available online at www.gaepd.org.

Printed on recycled content paper.

On the front and back covers: Millions of tires were illegally stockpiled and pushed into ravines at this dump site in Upson County.

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