

## Recycling 101

**Why recycle paper? Because recycling paper creates Georgia jobs. First of a three-part series.**

**A**ccording to Bill Moore, President of Moore & Associates, Georgia's paper industry is responsible for \$10 billion in annual shipments of paper products, employs 25,000 employees with an annual payroll of \$1 billion, and consumed 2.7 million tons of recovered paper in 2003 or 7.7 percent of the total recovered paper used in the U.S. In order to meet the American Forest and Paper Association's 55 percent recovery goal by 2012, the industry will need to increase paper recovery nationally by an incremental five million tons annually.

### **Paper mills in Georgia rely on recycling programs**

There are 15 paper mills in Georgia that rely on recycling collection programs to generate fiber they need for their operations. Counties from Effingham to Laurens to Bibb to the metro counties of Cobb, Henry, and Rockdale are home to nine of the 15 mills that rely exclusively upon recycled paper to feed their production facilities.

These mills are competing on a daily basis with rising energy costs and pressures from China, which is buying tremendous amounts of recovered material from the U.S. to fuel their paper production. "Our Dublin mill needs 850,000 tons of old newspapers each year to keep

our paper machines rolling," said Lisa White, material manager for SP Newsprint.

"We want Georgians to understand the vital role that recycling plays in our state," said Randy Hartmann, environmental management director at the Georgia Department of Community Affairs. "That's why we're partnering with private industries, the Georgia Recycling Coalition, and local governments to increase recycling rates. Everybody knows that recycling is good for the environment. We want to get the word out that recycling is good for Georgia business."

### **Steady decline among local governments recycling paper**

In the past few years there has been a steady decline in the number of local governments reporting to the state that they provided or had newspaper recycling services available in their community. In 1998, 456 local governments reported having newspaper recycling services available in their community; in 2003 that number fell to 365.

To help stem this decline and support local governments, SP Newsprint and others are rethinking the way they accept materials for recycling. Once famous for insisting only on newspaper in its collection

systems, SP is now offering free pickup of mixed materials, including all grades of plastic containers, as well as steel and aluminum cans.

"We've invested in new technology at our Forest Park recycling facility to let us buy more newspaper locally and maintain better control over the quality of our feedstock," said White. As technology and markets change, other Georgia mills, including Caraustar, Georgia Pacific, and Pratt Industries are also taking a fresh look at how they collect materials and are working with state and local recycling experts to help them recover more material.

If you asked the question a year ago — Can we implement a cost-effective recycling collection program in our Community? — and the answer was no, it is advisable ask the question again, White asserts. Single stream collection programs (recyclables mixed together in one truck or container) and the need for more quality recovered fiber by Georgia's paper mills means the answer may have changed to a resounding *yes*, providing a win-win opportunity for your community and Georgia's paper industry.

Last year alone Georgians threw away over 322,000 tons of newspaper, 730,000 tons of

corrugated cardboard, 225,000 tons of office paper, and 176,000 tons of magazines.

"The private industry's need for these materials really shows the importance of local recycling programs," said Rick Foote, manager of Hall County Resource Recovery. "They want these materials, they're paying good money for them, and they want to work with us to help them get more. Even if you disregard the environmental benefits, that's a good deal for local governments."

"This is one area where the state can support economic development and the environment," said State Representative DuBose Porter, D-Dublin. "By appropriating scrap tire fees to the Solid Waste Trust Fund, state leaders can help Georgia businesses collect their raw materials locally and economically. That's good for Georgia's environment and Georgia business."

The Georgia Recycling Coalition's Paper Council,

comprised of its paper industry members, began holding Paper Recycling Industry Days earlier this year at Georgia mills. The purpose is to provide local officials the opportunity to tour mills and see an overview of the paper recycling industry's impact in our state and how we fit into the national and global perspective.

The first event was held in April, 2005 at SP Newsprint's Dublin mill in Laurens County; a second tour is scheduled for October 21, 2005 at Caraustar's Austell mill in Cobb County and plans are underway to hold a Spring '06 event at Pratt Industries' Conyers mill in Rockdale County. □

*Those interested in attending the October tour, please contact the Georgia Recycling Coalition at 404-634-3095 or <garecycles@mindspring.com>.*

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**—State Rep. DuBose Porter**

**WE WANT YOUR PAPER!  
ALL OF IT!  
WE MEAN BUSINESS\$!**



For more information about recycling paper in Georgia, contact:

**georgiarecycles.org**

## Recycling Economics 101 Part II **Georgia's Paper Recycling Leads the Nation**

### **The Georgia Recycling Coalition**

**Paper and paper products represent the largest category of materials Georgians are throwing away. With nine of Georgia's 15 paper mills relying exclusively on recycled content fiber, Georgians have a great opportunity to recycle this portion of the waste stream.**

**U**nder the Solid Waste Management Act, the Department of Community Affairs is charged with annual monitoring and reporting on the implementation success of the state solid waste management plan and providing recommendations for improving the management of solid waste in Georgia. Since the adoption of the Act, which called for a 25 percent reduction in the per capita amount of municipal solid waste disposed in 1992, DCA has been monitoring several trends that impact how Georgians manage and dispose of solid waste.

Since the Act went into effect, the total per capita disposal rate in Georgia has continued to rise. Over the past decade there has been a shift in landfill ownership from the public to private sector. Current federal and state environmental regulatory standards, combined with the challenges to site new landfills, has given rise to fewer, yet larger regional landfills being sited in the state. In 2004, two-thirds of the waste disposed in Georgia was disposed in 16 privately owned and operated landfills, the remaining one-third was disposed in 41 publicly owned and operated facilities. In 1994 the state had less than 10 years of permitted landfill capacity, with much of the state having less than five years. Since 1994 the amount of permitted capacity has steadily

increased with the state reaching over 26 years of permitted landfill capacity in 2004. These two factors combined have resulted in very competitive landfill tipping fees, with a statewide average posted gate rate for municipal solid waste of \$35/ton in 2005. It is important to note that significant generators of waste pay much less, typically in the mid-teens for disposal. In addition, since 1998 there has been a significant rise in the amount of out-of-state waste disposed in Georgia, topping over one million tons in 2004.

#### **Per capita disposal rate constant.**

Focusing on just the municipal solid waste disposal rate for Georgians, we have seen the per capita disposal rate remain relatively constant since 1998, excepting a slight dip in 2002, largely attributable to a sluggish economy. Unfortunately, much of this "leveling-off" is not the result of increased recycling rates, but rather an increase in the number of construction and demolition landfills permitted and constructed in the state. In fact the number of local governments reporting they provide or have recycling collection services in their community has steadily declined since 1998.

Given these alarming trends coupled with the need for local governments to update their solid waste management plans, DCA felt it was important to identify what Georgians were throwing

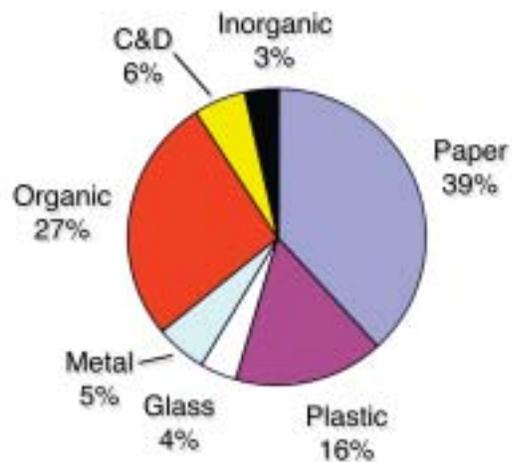
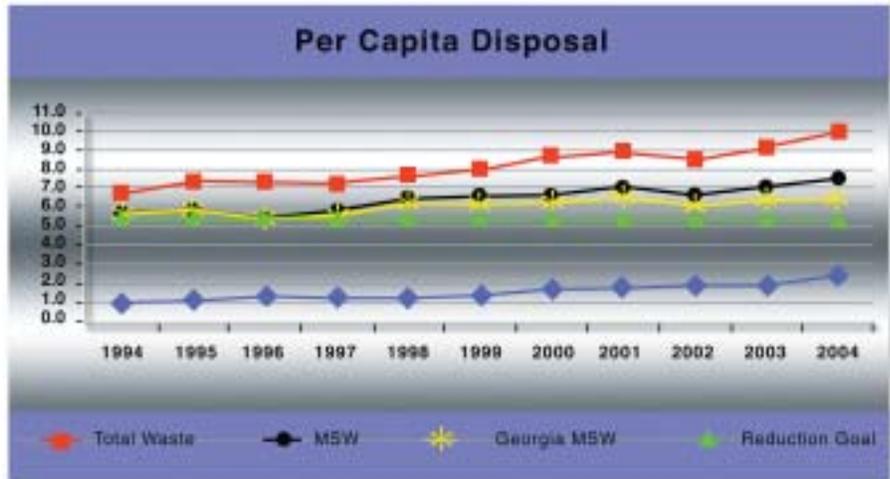
away. To determine what materials the state and local governments should target for waste diversion, DCA contracted with R.W. Beck, an engineering consultant firm with national solid waste experience, to conduct a statewide waste disposal characterization study. The study, conducted over four seasons in 2004, collected and sorted 568 samples of municipal solid waste generated in Georgia from both the residential and commercial sectors. Each randomly selected load of waste was sorted into 39 different categories. The recorded results were aggregated statewide and by Regional Development Centers into seven general categories — paper, plastic, glass, metal, organics, construction and demolition, and inorganic waste.

Looking at just those materials that are typically collected in local government recycling programs, the study shows that Georgians are throwing away 2.6 million tons of commonly recyclable materials a year. Based on current market values these materials have an estimated value of \$250 million. In addition, based upon the state's average landfill tipping fee, Georgians paid \$90 million to dispose of these same materials.

**Local officials can decide.**

“DCA is all about bringing resources to the table so local leaders can make informed decisions,” said Mike Beatty, DCA commissioner. “This study does just that: local officials can now decide which materials to target for recovery with existing, or hopefully even new, recycling programs. By getting these materials out of landfills and onto loading docks, Georgia can support local industry and reduce our dependence on controversial landfills.”

At 39 percent, paper and paper products represent the largest category of what Georgians are throwing away. With nine of the 15 paper mills in the state relying exclusively on recycled content fiber for their operations, Georgians have a great opportunity



to recycle this portion of the waste stream. The Georgia mills are competing on a daily basis with rising energy costs and pressures from China, which is buying

tremendous amounts of recovered material from the U.S. to fuel their paper production.

Focusing just on the paper waste disposed from the

residential sector, 70 percent of these paper products can be readily recycled in Georgia and in fact with rising fuel costs it is imperative to our Georgia industries that these materials be recycled here in our state. For years, many local governments have focused more on the collection of recyclables and solid waste and have tended to ignore what happens to the material and their potential value when recycled or their liability when disposed. By viewing local government recycling collection operations more like a business, communities can trim their costs.

"We've been working with end-use markets in Georgia and the Georgia Recycling Coalition. The interest they've shown in increasing recyclables collection in Georgia is impressive," said Randy Hartmann, director of DCA's Office of Environmental Management. "Local governments collect the materials these businesses

need. Counties need to work with these markets to ensure they are reaping the economic benefits of diverting these materials from landfilling and off setting their cost to collect recyclables."

Fluctuating market prices for recyclables can make it hard to predict how much revenue a collection program will generate. In lean times, local government recycling programs are among the first to feel the ax, but they are often not able to benefit from surges in commodity prices. Recycling program managers should negotiate long-term contracts with floor prices and revenue-sharing to share the pain and spread the wealth. Again, it's a business; recycling programs are supplying raw materials to local industries that need them. Therefore, recycling program managers should ensure they are part of the complete business picture.

"We've gone from the old mentality of 'Gosh I hope

somebody buys my stuff' to the new mentality of getting 10 calls a week from people trying to buy our materials," said Rick Foote, manager of Hall County Resource Recovery. "We've got people begging us for material. That's the transition that I think some people have not made yet, and that lag tends to be at the smaller centers that don't move as much material, where perhaps the recycling coordinator wears five different hats for their local government." For more information about the waste characterization study or DCA's programs, contact DCA's Office of Environmental Management at 404-679-4940. The waste characterization study can be found online at the URL, <[www.dca.state.ga.us/development/publications/GeorgiaMSWCharacterizationStudy.pdf](http://www.dca.state.ga.us/development/publications/GeorgiaMSWCharacterizationStudy.pdf)>.

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## 184,000 Tons of Paper per Month

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**Caraustar**  
RECOVERED FIBER GROUP  
 28,000 tons per month

  
**SP Recycling Corporation**  
 67,000 tons per month



  
**GP Harmon**  
ASSOCIATES  
 54,500 tons per month



34,500 tons per month

For more information about recycling paper in Georgia, contact:

# georgiarecycles.org

## Recycling Economics 101

Paper recycling creates solutions for local government challenges. Last of a three-part series.

### The Georgia Recycling Coalition

According to a Department of Community Affairs (DCA) survey of Georgia local governments, residents of 365 governments have access to systems to collect used newspaper. These programs can be public, private or non-profit. Other collection programs are in place for cardboard (287 local governments), magazines (280), phone books (234) and other grades of paper (206). It has become more challenging to recycle in many Georgia communities in recent years, as tighter budgets have caused some local governments to cut recycling programs. This, even as private sector demand for the material has increased.

DCA and the Georgia Recycling Coalition's Paper Council have partnered to reverse this trend of dwindling collection infrastructure. Many of Georgia's large users of recovered material, responding to overseas demand for their raw materials, are offering local governments attractive offers for their recyclables. If you're a local government considering starting or expanding a recycling program, now is a good time to start. In fact, many Georgia counties are coming up with a range of novel solutions to boost recyclable material recovery across the state. Here's a look at a few successful programs:

**Pooling recyclables.** The North Georgia Resource Management Authority has managed to pool recyclables from four mountain counties into a resource stream that is currently turning a profit, according to Executive Director Leslie George. By working together, Towns, Union, Lumpkin and Banks counties have created a viable network of recycling drop-off collection centers. All drop-off sites collect newspaper, cardboard, mixed paper, No. 1 and No. 2 plastics; Union County adds glass. So far in 2005, the authority has sold 310 tons of recyclable material.

"By itself, no county has the population density to generate enough materials to fetch a good market price," George said. "By combining all of our material we were able to get a really nice price. The economies of scale definitely apply."

The Authority used its experience working across political boundaries to create a 'wasteshed' that pulls recyclable material from four counties and their cities. Lumpkin County is developing a second drop-off center; the other counties have one each. The Authority is nearing the mid-way point on a five-year contract with SP Recycling Corp. that pays the Authority for their material, established a floor price but no ceiling, and doesn't charge for pickup of materials.

"It's a good contract," George

said. "We went into this venture with the idea of cost-avoidance, and I still say that's a good view to take. But our only expense is loading the containers, and we mostly use inmate labor for that. We're turning a profit."

George said the Authority was exhaustive in its preparation before beginning the program, which has been helped with a grant from the Georgia Environmental Facilities Authority. She's hopeful another grant application currently under review will be approved to help the recycling program expand.

"We studied this upside down, inside out to figure out the best program for us," she said, adding that curbside collection was out of the question given the rural area's tax base. "It's a very mountainous region, and nothing is close." The authority also uses Keep Our Mountains Beautiful regional Keep America Beautiful affiliate and special events to promote recycling opportunities in the region.

**Initiatives by counties.** In August, DeKalb County launched a comprehensive voluntary curbside recycling program. Residents are asked to subscribe to the weekly collection service for glass bottles, aluminum and steel cans, all plastic bottles (numbers 1-7), all grades of paper including newspaper, magazines, catalogs, flattened food boxes (i.e. cereal, crackers, cookies),

other non-coated paper packaging, and corrugated cardboard. Their unique collection system allows residents to place all paper mixed into an 18-gallon recycling bin complete with a lid, wheels and a pull string for easy delivery to the curbside. All other containers are placed together into a special blue bag. The bin is leased to participants for a one time fee of \$15; a 100-box of special blue bags is available for \$15. One year of collection costs \$25; so for a \$30 start-up fee residents can begin recycling at their curbside for about .50 cents per week.

Flattened corrugated boxes are placed beneath the bin for collection. The sanitation department uses rear-loader yard trimmings collection trucks to minimize contamination. Materials are delivered to the SPA Recycling Forest Park recovered materials processing facility. DeKalb has a five year contract with SPA to process recyclables collected in the program.

Education and promotion for the program is handled by a volunteer Recycling Task Force comprised of neighborhood leaders and recycling industry professionals, along with assistance from public works employees. The task force was formed by Commissioner Kathie Gannon who continues to be involved in developing and implementing "Train the Trainers" workshops. These workshops provide basic education and resources to community leaders so they are equipped to do presentations at homeowner's and civic association meetings, PTA, garden clubs, and any other groups that wish to promote the program in their communities. The goal is to phase-in concentrated pockets of dense participation within neighborhoods as the program rolls out county-wide, serving all of the unincorporated areas of the county.

**Other benefits.** Glynn County is changing the way solid waste is

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**-North Georgia Resource Management Executive Director, Leslie George**

collected, largely to combat illegal dumping. But recycling collection should increase as a result. Currently, about 820 of the county's households participate in a subscription curbside recycling program, paying \$35 each year for the service. Under the new plan, residential property owners will pay \$107 per year for weekly curbside waste collection, and recycling will be included in the service.

"We're optimistic this change will divert even more material to re-use markets," said Marsha Smith, Executive Director of Keep Brunswick-Golden Isles Beautiful. "A lot of our residents are already recycling, and this will make it easier for them, and encourage others to get started."

"Illegal dumping is a major issue, and this change is a way to deal with that," Smith said. "In addition, Glynn County is stepping up and offering curbside pickup of bulky items. That's really another major plus, and that really goes along with the illegal dumping concerns."

Residents will be able to request a recycling bin and fill it with newspapers, junk mail, magazines, cardboard, No. 1 and No. 2 plastic and aluminum cans.

A private waste hauler will collect the recyclables bi-weekly, and take over operation of the county's pair of convenience centers.

Keep Brunswick-Golden Isles Beautiful will be working to promote the new collection system before, during and after the roll-out.

**Enterprise fund.** Rural Hart County set up an enterprise fund to manage its waste and recyclables collection program in the unincorporated areas of the county. Users buy bags (two size options), and these fees cover 80 percent of the cost of the program, according to County Administrator John Caime. The bags are for garbage; recycling is included in the service.

"The great thing about Pay-As-You-Throw is that it gives people an incentive to recycle," Caime said. Residents source-separate the materials before dropping them off at the county's eight convenience centers or the transfer station that sends waste to Banks County.

"Recycling does take an effort. I'm sure there are a lot of folks who don't recycle because of the effort involved in separating the material. But having to pay to throw out their garbage gives them a financial incentive to recycle."

Ninety-four percent of the respondents to a county survey said they recycle. The program collects newspaper, mixed paper, cardboard, glass, aluminum, steel and No. 1 and No. 2 plastics. County employees ensure convenience center loads are clean, and bale them for sale. In 2004, Banks County sold 684 tons of recyclable material.

"We try to play the commodity market to maximize our return," Caime said. "A few years ago, cardboard wouldn't have gotten us anything. Now it's at a premium. So we're able to watch the markets and store materials until the price is right. Or until we run out of storage."

Hart County did its homework before beginning the volume-based waste disposal fee structure.

Common fears of increased roadside dumping were nipped in the bud.

“We did implement a strict enforcement program at the beginning, but we really haven’t had too much trouble with illegal dumping,” Caime said.

**Resources.** Getting the word out about recycling is a big part of the solution to increasing collection efforts. Many counties have events centered around Nov. 15, America Recycles Day. Increasingly popular electronics recycling collection events can be a great venue for encouraging participants to divert other, more commonly recycled materials to re-use markets. One way to promote your recycling efforts is to use Earth911, a free service that can describe your recycling service both on the web and a 1-800Cleanup phone directory. For more information visit their web site at

[www.1800cleanup.org](http://www.1800cleanup.org) or call Joe Dunlop at 404 679-1598 ([jdunlop@dca.state.ga.us](mailto:jdunlop@dca.state.ga.us)) with the Georgia Department of Community Affairs.

Another Georgia resource is the network of 69 Keep America Beautiful affiliates, more than any other state in the U.S., working at the grassroots level to shore up recycling collection. They make sure new residents are familiar with their collection options and get the word out through local media outlets at popular events like the Bring One for the Chipper Christmas tree recycling program and the Great American Cleanup. For more information about the Keep Georgia Beautiful programs and resources, contact Lynn Cobb, Manager KGB at 404 679-4910 ([lcobb@dca.state.ga.us](mailto:lcobb@dca.state.ga.us)) or visit their web site at [www.keepgeorgiabeautiful.org](http://www.keepgeorgiabeautiful.org)

The Georgia Recycling Coalition, the state 501c3 recycling

organization, facilitates several awareness programs annually including the America Recycles campaign. On or around November 15th each year, communities across the state hold awareness events to encourage increased recycling efforts at home, work and school, and to promote the purchase of recycled content products. For more information on this and their other programs, visit [www.georgiarecycles.org](http://www.georgiarecycles.org). □

*For more information about local government residential and commercial recycling programs, contact the Georgia Department of Affairs, Office of Environmental Management. 404-679-4940 or at the following URL: <http://www.dca.state.ga.us/development/EnvironmentalManagement>*

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